DOCUMENT RESUME

ED 413 792 FL 800 999

TITLE	Notes on Literacy, 1988-1994.
INSTITUTION	Summer Inst. of Linguistics, Dallas, TX.
REPORT NO	ISSN-0737-6707
PUB DATE	1994-00-00
NOTE	1524p.; A run of 24 consecutive issues of this serial. However, for numbers 57-60 (1989) see ED 338 114. Changed numbering system after number 65 (1991), which is also considered to be volume 17, number 1. Published quarterly.
AVAILABLE FROM	Summer Institute of Linguistics, Inc., 7500 West Camp Wisdom Rd., Dallas, TX 75236.
PUB TYPE	Collected Works - Serials (022)
JOURNAL CIT	Notes on Literacy; n53-56,61-65 v17-20 1988-1994
EDRS PRICE	MF12/PC61 Plus Postage.
DESCRIPTORS	Foreign Countries; *Literacy; *Literacy Education; *Reading Instruction; *Writing Instruction
IDENTIFIERS	*Vernacular Literacy

ABSTRACT

"Notes on Literacy" serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Articles address a wide range of concerns in literacy and literacy education, particularly in developing nations or uncommonly taught languages. Typical topics include: orthography; language planning; language and politics; morphology; phonology; vernacular literature; writing style; learning processes; text organization; adult literacy education; linguistic theory; teaching methods and classroom economic and social development; learning motivation; literacy and biliteracy; music and literacy instruction; schema theory; the whole language approach; indigenous editing; writing skills; language and literacy testing; dialectal orthography; teaching ethnic minorities; adult native language literacy; reading instruction; and literacy teacher training. (MSE) (Adjunct ERIC Clearinghouse on Literacy Education)

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Notes on Literacy

n53-56, 61-65, v17-20 1988-1994

(i.e., 24 Consecutive Issues)

A Serial Publication of the

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, TX 75236

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Notes on Literacy

No.53

Special Issue No.4

PAPERS PRESENTED AT THE FIRST INTERNATIONAL
LITERACY CONSULTANT SEMINAR
NOVEMBER 11-20, 1985

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ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

Dallas Center Bookstore

SUMMER INSTITUTE OF LINGUISTICS
7500 W. Camp Wisdom Rd.
Dallas, Texas 75236

EDITOR: Olive A. Shell

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NOTES ON LITERACY SPECIAL ISSUE NO. 4, 1988

THE ROLE OF LITERACY IN DEVELOPMENT

Julia Van Dyken, Africa Area

I. Introduction
II. Development and Literacy
  A. Perspectives of Development
  B. Perspectives of Literacy
III. The Role of SIL in Literacy and Development
  A. The Model
  B. Profiles Based on the Model
IV. SIL's Role in Relating Literacy and Development
V. Conclusion

I. Introduction

In 1979, in an international seminar on literacy held in Africa, a distinguished West African delegate stressed the need to make literacy increasingly functional. I totally agreed. Then he set this idea in opposition to traditional literacy approaches, saying that such approaches were historically used for accomplishing only one goal: to teach people to read the Bible. In 1984 an article was published in Sudan carrying a similar statement. Personal contacts with other Africans suggest that this view is common and tied to a negative colonial past. My question is, how do people who hold such views perceive the Summer Institute of Linguistics? One of the contacts had serious reservations, even initial hostility. To what extent might the views of these Africans be based not only on historical bias but on observation of present reality? What are the implications for SIL literacy programs?

The African delegate and I shared a common concern. How can we make literacy relevant and useful in the daily lives of those learning to read and write? In current technical terms: What relationship exists between literacy and development?

The purpose of this paper is to provide a framework for discussion concerning the role of SIL's literacy work as it relates to national and international development. First, perspectives of development and literacy and of their interrelationships will be explored, including alternative ideological underpinnings. Second, the role of SIL in relating literacy and development will be discussed in the light of a particular model of planning educational change (Bhola, 1982). Finally, a profile of the future role of SIL's literacy work in relation to development will be presented as well as its resulting implications.

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II. Development and Literacy

A. Perspectives of development

Concepts of development have varied across time and according to individual, or group, perspectives and have delimited the focus and scope of development programs.

1. Scope: community or national?

Historically, community development programs focused on local communities. Thus they were concerned that development is "for and by people" and "achieved through...local leadership" (Stoesz, 1975). This is the perspective that SIL members have generally taken, focusing on the community as the specific ethnic group for whom linguistic, literacy and translation work is directed (Yost and Yost, 1983).

Others, particularly governments and UNESCO, have looked at the scope of development at national and international levels. UNESCO's Experimental World Literacy Project was aimed at enhancing the economic national development of nations (cf. UNESCO, 1976).

Currently, however, both community development workers and national officials recognize the interactive relationships between the broader (national) and narrower (community) scopes of development. In this light, for example, the Federal Republic of the Cameroon developed in 1981 a national plan for community development which outlines a strategy for implementing a United Nations concept of development:

> [It is] the process by which the efforts of the people themselves are linked with those of government authorities in view of improving economic, social and cultural conditions of the communities, of integrating these communities into the life of the nation (Fluckiger, 1985, translation of her quote from the Plan National pour le Developpment Communautaire, 1981.16). (Also cf. Robinson, 1985).

From the community development perspective, intercultural community work must include the principle, to "cooperate with local, regional and national governments" (Gallman and Yost, 1982.6).

One concludes that today neither the nation nor the community or ethnic group can function as a unit totally independent of the other. Development of one must go hand in hand with development of the other. The scope of development is not an either-or choice, but one of cooperation and integration of efforts.

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2. Focus: economic, social, cultural, political

Definitions of national development during the 1960's focused on economic aspects of developing nations. During the 1970's the focus "shifted from the physical factors of growth to the human factors" (Massé, 1981. 5). It was extended to include "the social evolution of a whole people" (ibid.). Understood in this way,

> development involves the organization of the society, its human relations, its beliefs, attitudes, standards, divisions of responsibilities, awarding of privileges, its social values and the means by which the society protects and perpetuates these (Massé, 1981. 5).

By the 1980's the model of national development was again extended to encompass not only concerns for both physical economic development and human development, but all of culture:

> ...development is also to be judged by the effect it has on people in terms of changes in their life-style, their attitudes, their health, their level of education, their power to choose for themselves the kind of life they want to lead, and their relationships with their environment... The individual must be the end and not the means for development; ...a style of development appropriate for each culture or inspired from within the culture must be established for each project; ...this ...concept of development must be directed toward concrete and specific objectives, such as:
> - continuous economic development,
> - greater justice in the distribution of benefits,
> - respect for the physical, social and cultural environment, and
> - real improvement in the quality of life
>
> (Massé, 1981. 6).

This "cultural" approach to development was expressed and adopted by the United Nations:

> The ultimate action of development is the constant improvement of the well-being of the entire population on the basis of its full participation in the process of development and a fair distribution of the benefits therefrom. (Carron and Bordia, 1985. 12).

Carron and Bordia further elaborate:

> According to this approach development has to be understood as a global process of societal change in which a whole complex of interrelated forces--social and political no less than economic--interact upon each other (1985. 12).

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One concludes that this goal of the well-being of the individual through development processes involving participation and societal change, represents a consensus of international opinion as to what development is and involves. It is agreed that the scope of development encompasses both the local community and the nation; it focuses on the well-being of the individual and the society, enabling the individual and communities to reach their full potential; it uses participatory processes which involve the individual in his/her own social, economic and political development, and it results in improvement of the quality of life.

3. Ideological foundations

However, as one looks deeper at definitions of "well-being" and "quality of life" and considers the philosophical bases of development activities, one discovers that the activities can be used for leading people in opposite directions. There is no global consensus at the ideological level.

The ideologies underpinning development plans prove elusive. One cannot say, for example, that all programs with a given emphasis are Christian, Capitalistic, Marxist, or Islamic. Yet each of these world views influences the development plans in one country or another.

Christianity views community development as a process of growth or improvement. It is persons working together for the good of the whole community.

Capitalism and development: Development models in general have been based on other world views. The economic model of the 1960's, for example, assumed a capitalistic view of improving national economies so that the (then) new developing nations could become economically independent and control their own wealth (cf. Walter, n.d. 5). This ideology was translated into building factories, industrializing the nations, increasing their exchange of goods, numbers of salaried workers, etc. One might suggest that even the social model, though not exclusively, focused on development of manpower and was not concerned for the person so much as the usefulness to the capitalistic economic system.

Marxist philosophy also views the material world as ultimate. It is concerned with the problem of alienation: that "man is less than what he has the potential to be...(and that) man is separated from the product of his labor" (Walter, n.d. 9-10). A key Marxist concept is the dialectic process whereby two forces interact and, in the process of the resolution of their conflicts, a third "force" is created (Walter, ibid.). I would suggest that a Marxist view of development would center around this revolutionary process of conflict and resolution whereby new forces evolve. In this ideology revolution is key to development.

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Islam and development: In contrast to the economic center of Marxism and capitalism, religion lies at the heart of Islamic ideology. Yet Islam is more than a religion; it is an integrated culture with economic, social and political systems intertwined into the religious beliefs and practices. I would suggest that development for the Muslim believer would be to spread Islam throughout the world. It is a missionary religion and is highly organized.

B. Perspectives of literacy

What is the significance of these perspectives of development for literacy, and in particular for SIL's involvement in literacy work?

1. Definitions

Concepts of functional literacy have evolved and moved toward consensus along with the changes of models of development. The Experimental World Literacy Programs of UNESCO began when economic models of development were in vogue and naturally introduced the concept of functional literacy in a work-oriented context. Currently "the notion of functional literacy is...commonly accepted by most countries" (Lourie, 1985), but its definition has changed. As the focus of models of development broadened to include whole societies and human aspects of development, functional literacy concepts were extended to include the teaching of health, general welfare topics and civic affairs. When models took on even broader cultural focus, Freire's approach to literacy gained strength to the point that functionality of literacy came to be viewed by many as participation and conscientization of the masses.

As these definitions evolved, concerns about literacy focused decreasingly on teaching the skills of reading and writing and increasingly on strategies for making these skills functional. The focus of these strategies themselves changed from literacy programs to national campaigns. Stress was laid concurrently on the vital role of the political will for literacy activities to be effective in the development process. (Note that Gudschinsky's view of the complete literacy program, i.e. "Sarah's Circles", was developed when the strategy focus was on programs.) With the trend toward national campaigns and recognition of the role of the political will, the ideological base underlying the strategies takes on greater importance. Freire's approach seems compatible with Marxist ideology, but could equally be applied in contexts of development programs based on a Christian world view. The effect of any given approach will no doubt depend on the ideological base of the strategy of which it is a part. For example, while both Marxists and Christians are concerned with problems of injustice, the former might focus the conscientization discussions in the literacy classes on problems of alienation between the worker and the product of his labor, while the latter might focus the

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discussions on the problems of alienation between God and man and between people.

2. Nature of the relation with development

As development models moved toward concerns for the human side of development, going beyond physical economic dimensions, questions arose as to whether literacy was prerequisite for development or whether development was prerequisite for literacy. It is now agreed that the relationship between literacy and development is interactive (Carron and Bordia, 1985. 17; cf. Cairns, 1984), although the exact nature of the relationship remains unknown.

Literacy is now seen as inseparable from the development context. Lourie, Director of UNESCO's International Institute for Educational Planning, concludes:

> Translated into planning terms, the new concept of literacy means the explicit stimulation of people's initiative and participation and the constant co-ordination of literacy with other sectors of economic, social, cultural and political development (Preface, Carron and Bordia, 1985).

According to UNESCO's Draft Medium-Term Plan, 1984-1989, literacy is viewed as

> ...a vital element in any development strategy since it makes possible to give individuals and communities the knowledge and know-how that will awaken them to the projects open to them and above all, enable them to act more effectively themselves in improving productivity, hygiene, health and general living conditions and in exercising their civic rights (quoted by Carron and Bordia, 1985. 12).

Literacy experts recognize that this interactive relationship between literacy and development is complex, and carries implications for strategies of literacy work.

> This interactive process, it appears, cannot be bypassed, as far as the beneficial impact on mass welfare is concerned, by attempting to accelerate the spread of literacy in an isolated way that is largely out-of-step with other spheres of development (Ahmed, 1985. 379).

For Ahmed and many others, the interactive relationship requires an approach to literacy which is "consciousness-raising and action oriented" (1985. 384).

At a "World Literacy and International Cooperation Seminar" (1984), experts agreed on the following principles for literacy work: An approach to literacy must a) consider the social impact

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of its planned activities, b) use integrative approaches, c) recognize that literacy progress is affected by world economic conditions, and d) realize the links between literacy and socio-economic change (Preliminary draft of the Consensus of the Conference, appended to letter from Pat Davis, 1984).

To summarize, a certain consensus has been reached at the definitional levels of literacy and development, but underlying ideologies remain divergent. It is agreed that development is concerned with improving the general well-being of a population through its own full participation in the process, and that literacy involves not merely teaching the three R's but participation in the development process, and must be coordinated with all domains of development activity--economic, cultural, social and political. The ideological foundations, however, are rarely, if ever, discussed. One assumes that each nation and development agency follows its own plan of action based on its own philosophical base.

III. The Role of SIL in Literacy and Development

Given this international context of perceptions of development and literacy, SIL needs to ask where it fits into this global scene. Is SIL headed in the direction in which it should be going? What role does or should SIL play in literacy and development as defined internationally? To what extent will this vary by country or area?

The following section gives a framework (Bhola, 1982) for identifying links between SIL work and the international development context. This framework will then be used to profile three contrastive SIL programs which have integrated literacy with development. It is hoped that the readers will critically assess the model and the elements of SIL programs that it highlights, and will also use the model as a tool for thoroughly assessing their own Branch and/or individual language programs.

A. The model

Planned change involves linking ideology with policy, strategies, methods and activities. Each of the links then "factors out along two dimensions of a) institution building and b) human resource development" (Bhola, 1982. 6). Planning change requires consistency throughout: from ideology to activities, content, and methods, including both human and institutional dimensions at each level (see Figure 1).

> The [model] makes the simple yet oft-neglected point that the various links in the chain have to be anchored in the same value system and rooted in the same calculus of means and ends (Bhola, 1982. 6).

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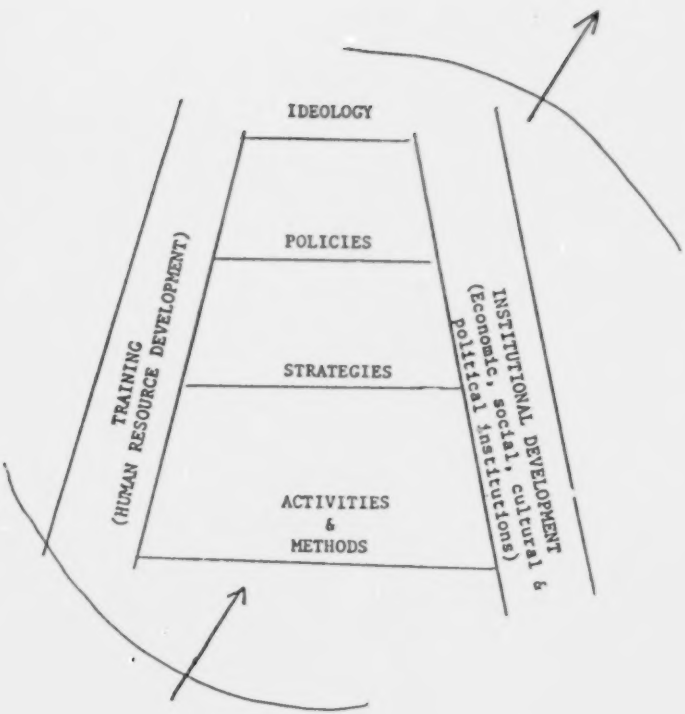
End Result of the
Development Process



Culture before the
Development Process
Begins

Fig. 1: Linking Literacy with Development: Potential levels of Linkages. (The model used here is a modified version of two elemental models of Bhola's Mega Model for Planned Change, Bhola 1982.6)

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B. Profiles based on the model

In this section the model is applied to three contrastive examples of literacy programs with which SIL members have been involved. The purpose here is to identify the aspects of these programs which clearly link literacy with development. The application of the model in developing the profiles may expose gaps where the links are not strong. These gaps, however, may merely expose the writer's ignorance of the details of the program examples chosen.

1. Maxakali - Brazil

The Maxakali program (see Profile 1) was initiated by an anthropologist-professor at a Brazilian university, although an SIL team had worked for more than twenty years doing translation work for the Maxakali. The program was primarily a development effort of which literacy work was only a part. It involved joint efforts on the part of the SIL team, a literacy team from the university, and the National Indian Foundation (FUNAI) (Popovich and Popovich, 1984. 15-22).

The ideological base of the university and of FUNAI have not been reported. Their goals, however, clearly related to economic development and the provision of health assistance. The SIL team supported these goals. Maxakali were encouraged to fully participate in their own development project. SIL was prepared to fully cooperate with FUNAI and the university.

The cooperative efforts resulted in the strengthening of ties between the Maxakali, FUNAI, the university and the SIL team. Thus institutional development was part of the project, though not in focus.

Training, or human resource development, included not only teaching Maxakali to read and write but to functionally apply their skills in writing books for their own people and running the canteen for themselves, applying the math skills they were taught in Portuguese. Maxakali were also trained in agricultural methods and maintenance of tractors and other equipment.

The strategy also involved integrating workshops for developing materials and training teachers. The canteen provided economic assistance and health care. Development themes integrated all the activities and methods. The whole program was aimed at adults, not children.

At the activities and methods level, the Gudschinsky method was used for developing new primers. It would seem that these primers did not teach any new concepts related to health, agriculture or any other economic topics. The introduction of new concepts was left to the postprimer stage. Writers workshops were conducted to develop postprimer materials. It is interesting to note that when the first materials were developed

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Result: - Maxakali self-image strengthened.
Many became Christians.

IDEOLOGIES:
- SIL: Christian
- FUNAI: ?
- University: ?

POLICIES:
- Maxakali participation
- Cooperation between SIL, FUNAI and the university

TRAINING:
- agriculture methods
- maintenance of equipment
- reading & writing
- writers
- teachers
- math in Portuguese
- Maxakali language to literacy team of university.

STRATEGIES:
- Adult education program
- Integration of training and activities around development themes, especially economic & health themes.
- Integration of efforts of the university, FUNAI & SIL

INSTITUTIONAL DEVELOPMENT:
- Closer links between Maxakali, FUNAI and university.

ACTIVITIES & METHODS:
- workshops
  - -teach Maxakali language to literacy team of university
  - -train writers, teachers, etc.
- canteen with economic assistance
  health assistance
  math in Portuguese

Starting Point:
- Presence of SIL translators (20 years)
- Small ethnic group with poor self-image.

PROFILE 1: Maxakali Literacy and Development Links

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by the literacy team, 70% of the content involved introducing new ideas, and only 30% were on topics of traditional knowledge, such as folk stories; but these figures were reversed when Maxakali graduates from the writers courses began writing the materials.

It appears that the Maxakali project consistently integrated literacy and development. Links were consistent between ideology, policies, strategies, activities and methods. Training and institutional development were an integral part of the total plan for cultural and economic change among the Maxakali. As a direct consequence of the literacy-development project initiated by the university, the Maxakali self-image grew. They realized they could now do what they previously thought only the outsider could do.

2. Yacouba - Ivory Coast

The Yacouba, in contrast to the Maxakali, are a large ethnic group in West Africa with a quarter million speakers and a strong self-concept. They are, in general, a highly motivated community, with up to 30% being educated in French. One might say that this context is highly literate in comparison with the Maxakali's starting point. The contrastive nature of the Yacouba literacy work demanded a contrastive program (see Profile 2).

The primary strategy for the project was to work through the church. The program was introduced by an SIL team and close links were developed with churches. The literacy program was later linked with the community in general, at which point a Yacouba world view entered more directly into the picture of ideologies underlying the project.

It appears that the key policy related to development views was one of participation: a part of the community was intended from the beginning to be in charge of its own literacy project.

At the strategy level, the Yacouba program was directed toward adults. Training and institution building were key strategies, as an effective system of committees and training workshops were designed which integrated the program and involved a maximum percentage of the Yacouba in their own literacy work. Training workshops, supervision, and coordinating committees integrated the program into a unified plan of action.

However, in terms of relating literacy and development, the limited information suggests that the program was not originally designed around development themes. Materials related to development topics such as health and agriculture were provided as supplementary material or postprimer material, but not incorporated into a strategy directly designed to link literacy and development as defined internationally. Given the high motivation level of the Yacouba and the high value they place on education, the need for purposely planning to link literacy and development may not be as vital as it was among the Maxakali.

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Result: - Ongoing literacy program, not dependent on the SIL team.
- Hundreds becoming literate.

IDEOLOGY:
- Christian
- Cultural world view of the Yacouba

POLICIES:
- participation: the community was intended from the beginning to be in charge of its own literacy project.

TRAINING:
- local writers
- local teachers
- 3 supervisors
- trainers of teachers

STRATEGIES:
- adult education
- training and institution building were key strategies
- training workshops, supervision, and coordinating committees integrated into a unified plan of action.
- development themes were not central to the program, but provided as supplementary material.

INSTITUTION BUILDING:
- system of committees integrate the program and involve the Yacouba community in their own literacy program. (This is also a key strategy for making the program participative).

ACTIVITIES & METHODS:
- short workshops for training teachers, writers, etc.
- Gudschinsky method primers
- unique orthography with effective means for marking tone.

Starting Point:
- Highly motivated community
- Up to 30% of the community are educated in French
- High value on education and literacy
- 250,000 speakers of the language

PROFILE 2: Yacouba Literacy and Development Links.

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However, outsiders viewing the program might have valid reasons for questioning the functionality of this literacy program, given their definition of development and of how literacy and development should be linked together.

At the level of activities and methods, short workshops were used for training teachers, writers and trainers of teachers. Reading and writing skills were taught following Gudschinsky-type primers, without any introduction of new ideas. The orthography developed for the Yacouba used a unique system which has proved very effective for marking the tones of the language in such a way that the people could learn to read them easily. It appears that these activities and methods focus on technical skills and literacy per se. The functionality of the materials could be questioned by outsiders, even though they are being used to effectively teach hundreds of Yacouba to read and write.

The result of the Yacouba program has been very positive; the program goes on even in the absence of the SIL team. Many, or perhaps even most, of the new literates are involved in churches in the Yacouba area, and are likely to continue reading.

3. IRL/SIL - Southern Sudan

SIL work in the southern region of Sudan began a few years after their 17-year civil disturbances ended. The region was in the process of developing and rehabilitating almost every area of government, education and life simultaneously. While autonomous to run its own affairs, it was dependent on the central government for financial resources and general national policies. Education had been interrupted for most of the civil war period, so that only limited numbers of the population had university training.

Most comments here apply to the 1979-1982 period when the Southern Regional Ministry of Education (SRMOE) faced serious problems which made it difficult for them to function effectively. Almost everything has changed at least politically since that time, so this profile is presented only as documentation of history.

During the 1979-1982 period, conflicting ideologies plagued the IRL/SIL literacy program (see Profile 3). The motivation underlying the Southern Sudanese policy to develop a bilingual education system was that this would facilitate the maintenance of the indigenous regional languages and cultures. Islamic values held by some Sudanese meant that they were strongly opposed to the program for propagating local languages, which was seen as a threat to Arabic. However, in general, most Southern Sudanese identified themselves with values more closely linked with Christianity and/or traditional religions.

At the policy level, SIL cooperated with the SRMOE to help establish a trilingual education system using Arabic, English and

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Results: - limited, vary by ethnic group, dependent on local interest

IDEOLOGY:
- SIL: Goal= Vernacular education, Scriptures in use
- Regional government: Goal= language maintenance
- Central government: dominated by Islamic ideology, but official freedom of religion

POLICIES:
- Participation, especially through governmental structures at variety of levels
- cooperate with governments, particularly Southern Regional Ministry of Education (SRMOE)
- No clear focus on development themes; this was seen as the role of a cooperating government body, the Curriculum Development Center (CDC).

TRAINING:
- counterparts
- supervisors (language officers)
- teacher-trainers
- teachers
- writers
- school children
- production
- manager
- typists

INSTITUTION BUILDING:
- Creation of a new department in the SRMOE (the IRL) as counterpart to the SIL literacy team.
- new roles
- new positions
- new relationships
- new budget
- The new dept. needed to be linked to the existing structures.

STRATEGIES:
- bilingual education program (for children). No adult education.
- began with focus on material development, and broadened to center around the development of the IRL (Institute for Regional Languages) and the training of personnel assigned to it.

Training related to:
- institution building (administration)
- primer and postprimer development (skills in focus).

ACTIVITIES & METHODS:
- develop primers: Gudschinsky method
- train writers
- develop postprimer materials
- alphabet books
- production of books (layout, art, typing, printing)

(Focus: on skills of reading/writing, not on functional applications)

Starting point:
- Post-war rehabilitation period
- National context: Arabic as national language
- Limited resources: financial, personnel
- Major problems in SRMOE

PROFILE 3: IRL/SIL Literacy and Development Links (Southern Sudan)

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one of seven regional languages depending on the location of the school. It was agreed to receive a grant from USAID to finance those aspects of the bilingual education project which involved one-time expenditures, such as buildings and publication of primers. Participation of the Sudanese at all levels of the project was desired. This participation particularly involved government teachers assigned to a new department in the SRMOE, called the Institute for Regional Languages (IRL). The work of IRL and SIL gave little attention to development themes, since it was expected that another department of the SRMOE, the Curriculum Development Center (CDC), would prepare appropriate materials for the various subject areas required in the school system. (Unfortunately, for various reasons, the CDC was never able to accomplish that task, so the IRL program was left in a situation where its focus was on the teaching of the technical skills of reading and writing without providing the children opportunity to use those skills functionally in learning other subject matter.)

Strategy-wise, the program in Southern Sudan concentrated on primary school children. Politically it was not feasible to hold adult education classes. The project began with a focus on material development and broadened to center around the development of the IRL and the training of its personnel needed for implementing the regional policy of bilingual education. Thus, institution building and training were key elements in the strategy.

On the initiative of the Sudanese, a new department was created within the SRMOE, i.e. IRL. The complexity of this department grew, as it became clear as to the wide variety of personnel needed. The newness of the department meant that there were people in the SRMOE with new roles, new positions and new relationships including new relationships with the Ministry of Finance and new budgets within the SRMOE budget, which was already meager. The new department needed to be linked into the existing governmental structures of education. These links had not yet been fully worked out by 1982 when the total system of government in the region was thrown in chaos by a central government decision to divide the region into three separate regions. At that point it became necessary to reassess the strategy of institution building.

The training strategies of the program centered around IRL personnel, equipping them to run their own bilingual education program. This meant focusing on teaching IRL counterparts to SIL team members (consultants and administrators as well as supervisors, teacher-trainers, teachers and writers) rather than directly on instructing children to read. The latter would ultimately benefit when taught by their Sudanese teachers who were trained in the IRL/SIL program. Apprenticeship covered not only primer construction methods and teacher and writer training but aspects of administration as well.

The results of the project were limited. Institution

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building was halted by national political redivisions. However, where grass-roots interest had been ignited and where ethnic groups were prepared to continue the program on their own, children continue to acquire literacy in the mother tongue.

In the case of the Southern Sudan project, the links between literacy and development were essentially limited to helping develop the IRL and its personnel. The materials and methods generally focused on skills of reading and writing or teaching, not on functional applications of those skills to the development context of the region. It was always hoped that CDC would function effectively and a cooperative effort with them would provide the functional aspects to the project, but evidently this never happened.*

IV. SIL's Role in Relating Literacy and Development

The three programs chosen were selected on the basis of their contrastiveness and convenience in a situation where a lot of resource materials were not easily available. Yet while each program was uniquely adapted to the culture and context, each did, to a greater or less extent, link literacy and development. But selection of three programs means ignoring hundreds of others: programs which may be more representative and which in some cases may not be linked at all with development as it is understood internationally.

The following is a suggested profile of what the role of SIL could be and is moving toward. These ideas are to stimulate thinking and provide a basis for discussion:

1. At the ideological level

SIL members act out their belief in the message of the Bible which is love, and apply it in relationship to improving quality of life and well-being of the communities and individuals with whom they work. Thus they see their goal of providing Scriptures for the world's ethnic groups and their desire to see those Scriptures used, as being in complete harmony with a ministry to the whole person.

2. At the policy level

SIL members intend to work increasingly in partner relationships with national workers in each country. Therefore they will continue to encourage cooperation with other agencies--national and local, governmental and ecclesiastical--but will need to be alert to the fact that the effectiveness of programs (as perceived from their "outsiders" point of view) may be endangered if the ideological bases of the cooperating groups conflict with their own. They will continue to recognize that

*The Curriculum Development Center (CDC) struggled with its own problems of institution building and human resource development.

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each program must be uniquely adapted to its own context, so that the policies guiding one program may differ radically from those guiding another.

3. At the strategy level

Strategies will, therefore, continue to be program specific. However, SIL members may come to the consensus that activities and methods can be increasingly integrated around development themes. Development of materials--whether primers or post-primers--will no longer take primary focus (as in the past), but instead they will increasingly develop strategies that relate to development needs of the community. Thus, while they continue to teach the skills of reading and writing and use their linguistic technical expertise in this area, they will increasingly design their language programs to use literacy aspects as tools for development, focusing on the functionality of literacy.

Training and institutional development will continue to be key dimensions of their strategies. Institutional development will include not only typing the program into existing local economic, social, cultural and political structures, but also strengthening ties between local ethnic communities and appropriate national departments or agencies of development. Training strategies will account not only for teaching people to read, but also training teachers and writers as well as, when needed, artists, production managers, administrators, etc. These strategies will also go beyond the teaching of technical procedures, in order to enable the trainees to reach full potential in all areas of life.

4. At the level of activities and methods

SIL members will continue to follow Wendell's approach to writer training as it has been shown to develop the writers to their fullest potential. One might say that this training incorporates a type of conscientization. Writers are encouraged to reflect on their lives as individuals and as ethnic groups and to act to improve their quality of life through writing and practical experience.

Methodologically in terms of teaching literacy skills, SIL members will use the Gudschinsky method with increasing flexibility, recognizing that content and meaning are more important than the linguistic technical aspects of instructional material. It seems they have historically stressed the development of linguistically-sound orthographies and of Gudschinsky-method primers which could account for each sound-symbol correlation as well as the higher (e.g. discourse) levels of the language, and in the process they have placed development-related content on the back burner. They have labeled (at least subconsciously) development-related materials as being a type of Stage 3 literature, which although necessary, make up only a relatively small percentage of the materials they have actually

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produced. Having recognized this, the percentage of writers trained to produce Stage 3 material will increase, along with publications with development themes.

As more development-oriented materials are produced, training courses will increasingly incorporate the teaching aspects relative to those development themes. More participative approaches will allow teachers to reflect and act on development topics and enable them to lead literacy class discussions. Training of teachers needs to get beyond a focus on procedural aspects of teaching literacy skills.

To conclude, the literacy activities, content, and methods SIL literacy workers use and advocate will increasingly take account of the development context within which the materials are being designed or training given. They will plan their language programs so that literacy activities are not isolated as a means to themselves, but are integrated by strategies which link literacy both to seeing the Scriptures in use and to the development context and needs to improve quality of life and well-being. Human development training and institution building will be key dimensions of their strategies. These strategies will be assessed to ensure that they are consistent with policies and ideology.

V. Conclusion

If literacy personnel will be expected to work with development-related content, they will need expertise not merely in linguistics but in education and in the various subject areas of concern--notably health, domestic and agriculture-related topics. Increasingly literacy experts outside SIL are calling for team approaches, so that experts in specific topic areas are on hand and take part in material-development workshops. If SIL members would increasingly work with such team approaches they could bypass the need to be experts in everything, and in the process they could build up further good relations outside the circles with which they normally relate.

If they take it seriously that their literacy activities, and particularly their primers, can be related to development issues, they will need to take more flexible approaches if and when they use the Gudschinsky method for writing primers. They need to consider ways and means for participative approaches in teaching literacy, such as language experience approaches and discussions which involve conscientization to a potentially better quality of life.

SIL members are increasingly realizing that strategies are vital to language programs. If they believe these strategies should include development themes and be sensitive to both local and national contexts, they need to prepare <u>all</u> their members involved in these programs for effective program planning. The principles in the SIL Language Programs courses in Dallas and

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Norman need to be disseminated to all the teams and Branch leadership, possibly by making the course a requirement for all and/or by workshops on the fields. Each of the SIL teams needs to be equipped to evaluate a program in terms of the extent to which it does or does not integrate activities around the development themes, whether of health, domestic skills, agriculture, Scripture in use, etc. and relate them to social, cultural and economic needs of a given community. This will require skill, training and close cooperation with the SIL intercultural worker consultants. SIL members need to ask themselves what percentage of their consultants are trained to act as language planning consultants. Is more training needed? More personnel? Do more of the consultants need training in intercultural work/community development areas? Undoubtedly part of the success of the Maxakali and of the Perú bilingual education programs has been that they linked community development with the teaching of literacy. Do more of the Branches need to consider these links and encourage teams to plan them into their language program strategies?

If SIL members wish to relate to national development themes, they need to know the national development plans for the next five or ten year periods. What percentage of the Branch leaders are informed of these plans? Is this knowledge being disseminated to language teams?

Regarding the strategy of institutional development, SIL members need to continue linking their language programs into the indigenous socioeconomic, political and cultural structures, and also to strengthen the links with national bodies. In some instances it may be necessary to develop new organizational structures, such as happened in the Sudan case. However, this approach needs to be taken very cautiously with the awareness that developing new institutional links takes time. Branch administration could help identify national bodies involved in various aspects of development in the country and through these bodies identify local bodies with which SIL teams could cooperate. SIL needs to ask itself to what extent teams/Branches recognize in their program designs that ethnic groups are no longer isolated entities which can exist without links with national bodies.

Linking literacy and development will mean reviewing SIL training programs. The major concern should be a focus on training nationals. In development terms, is SIL helping everyone they teach to reach their fullest potential, or are their teaching styles selective? To what extent do their approaches to teaching match and facilitate diverse learning styles? Do they realize that learning styles deal only with half the picture of the teaching-learning process? Do their training approaches allow and encourage participation? Or are their approaches oppressive, forcing the learning to fit into a mold?

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At the policy level, because they believe in the autonomy of each team and trust that the workers will be sensitive to the ethnic group members among whom they work, SIL would not want a policy explicating precise ways and means for community and national development, but they would want a policy which shows concern for the well-being and participation of the community.

In terms of funding, it is clear that large funding agencies demand that development concerns be integrated clearly into any programs they will fund.

In dealing with the issue of ideology, we may find ourselves again haunted by the question with which this paper began: How do people such as the West African delegate view us? Are they justified in seeing us as an organization which is concerned only with seeing people read and not with their physical or social or cultural or political well-being? To what extent does their image differ from that which we have of ourselves?

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VERNACULAR LITERACY: PROBLEMS IN THE WORK WITH AUSTRALIAN ABORIGINES

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I. Introduction
II. Background
III. Vernacular Literacy Programs
  1. Branch Accomplishments
  2. Problems in Vernacular Literacy
  3. Some Solutions to the Problems

I. Introduction

The purpose of this paper is to explain the unique problems we in the Australian Aborigines Branch of the Summer Institute of Linguistics (AAB) have had in developing vernacular literacy. The paper is in two sections. The first presents background concerning conquest, government policies, language and culture, schools, adult education and aboriginal Christianity. The second looks at what the AAB has been able to accomplish, the problems we face and some possible solutions to the problems. I am not sure that our problems are unique. Perhaps much of the following may strike a familiar chord in the experience of others.

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II. Background

There were once about 300,000 aborigines, five to six hundred tribes, ranging in size from a few hundred to two thousand or so, living in Australia, an area about 80% the size of the United States. Today there are about 160,000, 1.1% of a multiracial but predominately white caucasian society of about 14.5 million (Australian Bureau of Census and Statistics, 1981).

The aborigines were hunters and gatherers who moved systematically around their territories in small family groups. They lived in a variety of climates and terrains ranging from the tropical rain forests of Northern Queensland to the sand and spinifex (spiny grass) deserts of the dry interior, and from the temperate riverlands of Victoria and New South Wales to the evergreen forests of Tasmania. They had their own unique culture--a simple technology, an intricate kinship system and an animistic religion with associated rituals and arts. They had no literacy as we understand it but possessed a rich orally transmitted mythology. They were and still are strongly attached to the land from which they believe they have come. Linguists believe there may have been as many as 200 aboriginal languages (Abbie, 1969; Berndt and Berndt, 1977, 1978; Dixon, 1980).

1. Conquest

The colonization of Australia by nonaborigines began in 1788 with the establishment of a permanent settlement at Sydney Cove. Initially settlements were around the coast and later on the better-watered river plains a hundred or so miles inland at the most. During the first century of settlement land was steadily wrested from the aboriginal people and used for farming and small-scale grazing. The dispossessed who survived maltreatment became farm labourers, stock handlers or fringe dwellers. These latter lived in camps on the fringes of small rural towns, but later began to gather near larger cities. Those who worked received their wages in flour, sugar, tea, locally killed meat and cast-off clothes. The fringe dwellers, no longer able to provide for their needs by hunting, depended upon handouts of food from missions or government welfare agencies for their survival.

A second wave of conquest, from the mid 1800's to the 1940's, moved further inland and took up nonarable land suitable for large-scale pastoral grazing. Cattle and sheep stations[1] were established, some consisting of hundreds of square miles. Again aborigines were the losers. Their hunting land, sacred areas and watering places were taken from them, with continuing abuse. Some aborigines remained as workers on the pastoral stations. Others drifted to towns or moved and settled on the land of other aboriginal groups.

Mission stations were established. Some groups of aborigines still living in their own country, in too harsh an

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environment for even the pastoral leases, were brought into the missions. Some groups drifted in and out of pastoral and mission settlements, attracted in hard times by handouts of 'white fella tucker'.[2] They eventually became dependent on such handouts and settled down. Mining ventures, a third wave of conquest, further dispossessed the people and desecrated their sacred places.

2. Government policy

Australian government policy toward aborigines has gone through several stages. The 'aboriginal problem' has not been an easy one for the government to handle and even the best-intentioned policies have often had disastrous effects. Prior to the Second World War the policy of the Australian government on aborigines can best be described as protective and restrictive. Aborigines were protected by the state (so, for example, no one was permitted to sell them alcohol), but they had no citizenship rights. They were discriminated against and treated as second class human beings, if human beings at all. With few exceptions (some benevolent station owners and other humanitarians with a variety of motives), the only work done to help aborigines was that of the missions. Mission stations were established throughtout Australia: some by denominational missions, some by small independent groups and others by individuals. A few missionaries learnt aboriginal languages, respected the culture and develped a tremendously detailed understanding of aborigines. But most missionaries, and I say this without judging them, were the products of their age and their prejudices.

From the mid 40's to 1965 the official government policy changed to one of assimilation. Rather than being ignored and neglected the goal was for aboriginal people to be assimilated into the wider Australian society. Many missionaries adopted this policy partly because much of the revenue needed to run the missions came from government sources.

In the southern and coastal areas in particular, tribal groups were more widely dispersed. Almost all of traditional land was lost, and the nonaboriginal population became dominant. Here the breakdown of traditional authority, discipline and family structure was almost total. Children were often taken from their parents and sent away to mission stations, perhaps hundreds of miles from their home country. At the mission the children would be cared for, schooled in English and taught practical and work skills. Adults were written off as hopeless cases. The thought was that if the children could be separated from their parents, 'who were neglecting them anyway', there might be some chance of saving the next generation and making them into decent citizens. Separated from their families and bundled together with children from other language groups, these children lost most of their language and culture and with these often their identity and purpose for life.

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Even in isolated areas with sparse nonaboriginal influence, missions working with groups more recently from the 'bush'[3] set up dormitories. Children of school age were taken from their parents and lived in these. They were fed, clothed and educated by the missionaries. They saw their parents only occasionally.

The following quote from a close aboriginal friend of mine describing life as a child in the dormitories helped me to understand how he felt about this era:

> 'I was born in the bush out on the Canning Stock Route,[4] we camped around the wells. My parents travelled from one well to another for food and water.
>
> I went to school at Jigalong. It was a mission. There was only one woman teacher. We played games like drop the hanky, cricket and soccer. The mission made us go there. Our early school days were all right. But we didn't go back to see our parents anytime. They wouldn't let us.
>
> When we were at the mission we were locked up in the dormitory at night. It was more like a jail. Our parents used to live close to the mission so they could see us. We couldn't go off and see them (Joshua Booth, 1984).'

In these 'enlightened' days policies have changed. In 1965 the government moved from its assimilationist stance. In 1967 following an Australia-wide referendum aborigines were granted citizenship rights, including the right to drink alchohol. Within a few years many mission stations closed down. Some became government-sponsored aboriginal communities. In 1973 the official policy became self-determination. Community councils were set up and in theory aboriginal people were to determine their own destinies. In 1975 the policy became officially self-management (Watts, 1982). Under this policy ongoing training was to equip aboriginal people to run their own communities.

3. Language and culture

Today the languages and much of the culture of many aboriginal groups has disappeared. In the southern and coastal areas those remaining are mostly of mixed descent with a few 'full bloods'.[5] The distribution of most of remaining strong languages can be seen on the map on page 26. Even in the more isolated areas, the strong tide of the wider Australian culture keeps eating away at the edges of the small aboriginal cultural islands that remain. Even in the most traditional of aboriginal communities aboriginal social and authority structure is disintegrating. Customs that were designed to coordinate and control a wandering band of thirty people cannot cope with the pressures of large community populations of as many as 1000 people. Traditional informal education is no longer effective in passing on language and culture.

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1. Pitjantjatjara	BL	AD	SIL	
2. Ngaanyatjarra		AD		
3. Martu Wangka	BL	AD	SIL	
4. Nyangumarta	BL	AD	SIL	
5. Walmajarri		AD	SIL	F
6. Kitja	BL			
7. Guqadja	BL			
8. Tiwi	BL	AD	SIL	
9. Murrinh-patha	BL	AD	SIL	
10. Maung	BL	AD		
11. Gunwinggu	BL	AD		
12. Bularra	BL	AD	SIL	
13. Gupapuyngu	BL	AD		
14. Djinang			SIL	
15. Djambarrpuyngu	BL	AD	SIL	
16. Dhangu'mi				
17. Gumatj	BL	AD		
18. Anindilyakwa		AD		
19. Munggubuyu				
20. Kriol	BL	AD	SIL	
21. Gurindji	BL	AD	SIL	
22. Waripiri	BL	AD	SIL	
23. Alyawarra			SIL	
24. Aranda				
25. Yanyuwa		AD	SIL	
26. Garawa			SIL	
27. Kuku-Yalanji	BL	AD	SIL	
28. Wik-Mungkan	BL	AD	SIL	
29. Thaayorre				
30. Kala Lagawa Ya		AD	SIL	
31. Yindjibarndi		AD	SIL	
32. Djaru				
33. Miriam Mir			SIL	
34. Pintupi/Luritja	BL	AD	SIL	F
35. Eastern Aranda			*	
36. Torres Strait Broken			*	
37. Cape York Creole			*	

ABORIGINAL AND TORRES STRAIT LANGUAGES CURRENTLY WITH BIBLE TRANSLATION PROGRAMS OR WITH COMPLETED PROGRAMS

KEY

- BL Bilingual program of some sort for children
- AD Some adult vernacular work being done
- SIL SIL participating in the program
- * Not yet allocated
- F SIL involvement ended

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Many missionaries in the past ignored aboriginal language and culture. Some actively tried to stamp it out claiming it was 'of the devil'. As I have already said, a few learnt aboriginal languages, studied their culture and respected the aborigines as people. But in many places it was forbidden to use vernacular languages in school. It was not uncommon for children to be beaten for 'speaking native'. Even in the late 60's a school with which I am familiar had a row of stones beside the path leading up to the door. On these were painted the words, 'Do not speak native in school.'

On mission stations and in fringe camps, and to a lesser extent in large cattle station communities, aborigines from many different language and dialect groups came together. In order to communicate with each other, they had to learn each other's languages and dialects or to develop a lingua franca. Community dialects, mixtures of vocabulary and grammatical elements from several related dialects, and Kriol (the official name of an aboriginal-English creole language with as many as 25,000 speakers) has developed to meet this need. In any one community there may be representatives of nine or ten dialects or languages, some mutually intelligible and some not. Kriol has tended to be used where there is less mutual intelligibility. A further complication has been the need to communicate with the 'white fella'. The more sophisticated have learnt to speak standard English. Others have developed nonstandard forms of English.

Aboriginal communities themselves are often far from 'aboriginal'. Many have quite large numbers of nonaboriginals--managers, tradesmen, nurses, teachers and the like--who help run the communities. Larger communities have schools, adult education centres, hospitals, stores, licensed clubs[6] and garages. Some communities run cattle businesses, some are involved in mining, some have market gardens and some manufacture tourist artifacts. One I know has an emu farm. Hunting and gathering, when it is done, is mainly a recreation now. The bulk of food is purchased from the store.

Aborigines are still very mobile, driving vehicles (often in incredibly poor mechanical condition) for thousands of miles to attend intercommunity ceremonies. But most aborigines do not want to move into towns. They feel the need of their family and country very keenly. Jobs are few in communities. Most people survive on government pensions, unemployment benefits and child welfare payments. Of those jobs available within the communities few require extensive training and most do not require literacy. There are few traditional aboriginal people who have a good education. Even the best educated do not like to leave their communities to seek employment outside. In any case there are few jobs available to aborigines in the Australian work place.

In most communities the average level of literacy is about Grade 3 or 4 in elementary school. In many communities there is

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almost no literature available. Some stores may stock magazines, comics and cheap paperbacks. The largest concentration of literature in most communities is at the school. Most of the items are children's books in English. Some are attractive and interesting but few are really relevant to aboriginal children. Some schools regularly open their libraries to the public. Few aboriginal people have books in their homes, read to their children or read themselves for pleasure.

More and more communities, courtesy of 'Aussat',[7] can watch the national TV station. More and more aborigines own radios, cassettes and video players. Some large communities have extensive video libraries. Some even have their own local TV stations. The Central Australian Media Association (CAMA), an aboriginal organization, has developed a radio station and plans to have a TV station. CAMA is based in the Northern Territory and broadcasts in four aboriginal languages as well as English. They have a cassette program as well. They record a variety of programs - music, interviews, stories and current affairs - on cassettes and send them out to isolated groups.

To escape the pressures and destructions of large-community life, some aborigines are moving to outstations or homeland centres. These are smaller communities, often more isolated geographically. Usually they are established in the traditional country of the group. Life here is more primitive, closer to traditonal ways, but even here aboriginal people are wanting vehicles, two-way radios, power plants, school teachers (usually nonaboriginal) and community managers or advisors. Many outstations have become mini versions of the large settlements.

Under these conditions at least fifty languages have completely disappeared. A further hundred have only a few older speakers left and these are not passing their languages on. Younger people are speaking Kriol, community dialects or English. What remains is fifty, probably fewer, languages ranging in size from two thousand to less than hundred speakers. Then there is Kriol with as many as 25,000 speakers (Dixon, 1982; Rowley, 1972 a, b, c).

4. Schools for aborigines

The first government education for aboriginal children was instituted in New South Wales in 1814 and most states made some attempts in the years following this, although these efforts were often short-lived. Missions invariably instituted schools as part of their programs. With a few exceptions schools and education have been hopelessly inadequate and have failed aboriginal people. The characteristics of schools for aboriginal children are summarised below:

(a) In line with the assimilationist policy of Australian governments, with a few isolated exceptions aboriginal education was conducted entirely in English until the early 1970's. Even

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today there are less than twenty government and perhaps ten mission and independent bilingual schools in Australia. The majority of these are in the Northern Territory (Northern Territory Department of Education 1985: i-ii). (See map page 26.)

With few exceptions there has been poor support from aborigines for the development of bilingual education programs. Few have come about as the result of the genuine felt needs of aboriginal people. Most are the result of the well-meaning efforts of a few dedicated nonaboriginal individuals, some of whom have wanted to see aborigines have a better education. Others have believed that to survive complete destruction aborigines need to develop a bilingual bicultural approach to life. These groups see bilingual education programs as a way of maintaining and strengthening language and culture. Some aboriginal groups have begun to voice what they may have known intuitively for a long time (Bucknall, 1982; Snowden, 1981) that school is essentially a tool of socialization and is being used by nonaboriginal Australians sometimes consciously, sometimes without really understanding the implication of what they are doing, to destroy aboriginal society.

Looking at the behaviour of governments supporting bilingual education, it is difficult to escape the conclusion, despite stated changes in policy, that they want anything other than assimilation. The argument that initial literacy in the vernacular strengthens the learning of oral and written English and thus improves educational standards seems to have been the one that caused them to dig deep in their pockets and 'bite the bilingual bullet'. And now the slow progress of bilingual programs, despite the massive financial and personnel resources poured into them, has brought bilingual education into disfavour. Let me hasten to say, however, that the results of bilingual education endeavours have not been entirely negative.

- Many young people are emerging from the schools with some skills in vernacular literacy.
- There have been some gains in English literacy skills and maths over prebilingual schooling results (Gale, McClay, Christie and Harris, 1982; Murtaugh, 1980).
- Many communities have developed an extensive vernacular literature, as many as 300 titles in some places. Most of these are small booklets, however, and there is little to interest the school graduate or the adult literate to develop and maintain the reading habit. The development of a large and attractive vernacular literature comparable in quality with that available in English appears to be a really difficult obstacle facing bilingual programs of this kind (Russo and Harris 1982). It is difficult to avoid the conclusion that the future of reading, at least the reading of secular material, must lie in English. Certainly education past elementary grades can be only in English.

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-A few bilingual programs have developed a small, keen group of aboriginal teacher aides. Some of these are highly literate in vernacular. They provide much-needed models of good reading behaviour without which it is doubtful if the level of literacy among aborigines will ever improve. One of the keys to progress in bilingual education must lie in the training of aboriginal teachers. Pro-bilingual education staff members in the Northern Territory Department of Education and teacher training institutions see this as the priority for future development (Harris, Graham, Buschenhofen, 1984; Harris, Graham, Odling-Smee, 1985). Whether they succeed will depend on aboriginal aspirations and government funding.

-A very significant development that has resulted from the work of nonaboriginal supporters of bilingual education in the Northern Territory has been the study of traditional aboriginal approaches to learning or learning styles. This work initially by Harris (1980) and later by Christie (1982,1983), has had a very significant effect not only on the way teachers in bilingual schools teach literacy but on literacy work that the Australian Aborigines Branch is involved in. A large number of papers have been written exploring the implications of this research for the aboriginal education scene. (Buschenhofen, 1982; Harris, 1978, 1980 a. b. c., 1982, 1984; Christie, 1980, 1981, 1982 a. b., 1983, 1984; Davidson, 1983; McEvoy, 1985; McGrath, 1983, are just a few of the more significant.)

(b) Most schooling has shown a lack of respect for aboriginal culture and language. The view has been that aborigines needed to be civilized and assimilated (Malcolm, 1979).

(c) Curricula used in aboriginal schools are mostly watered-down versions of those used in nonaboriginal schools. They have little relevance to life as it exists for aborigines outside school (Malcolm, 1979).

(d) In the early days many teachers employed in aboriginal schools were untrained or less qualified than their colleagues teaching nonaboriginal children. Often they were young and inexperienced and just 'doing their two-year stint in the bush'. Today, while most teachers employed are qualified, most are inexperienced and few have specialised training to enable them to provide a relevant and culturally sensitive education for aborigines. Very few stay in aboriginal schools for more than two years (Malcolm, 1979).

(e) Even though compulsory school attendance has been law in Australia since around the 1870's, few aboriginal children attend school regularly. It is interesting that in communities where missions, through the dormitory system, were able to enforce

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school attendance, a few individuals attained better levels of literacy (Malcolm, 1979).

(f) Under past and present conditions many aboriginal children have left school with negative attitudes to education and to literacy. Michael Christie (1983) has suggested, on the basis of extensive research, that many aborigines view school as a kind of rite-of-passage, an essentially meaningless ritual that one will ultimately pass through to enter the relevancy of adulthood. It appears that many aborigines, even some of those who have come through bilingual programs, have never understood the relevance of literacy. It is like a ceremony learnt from a neighbouring group, who in turn learnt it from a group further away. The words are not their language, they have no meaning, no real point aside from the performance. The fact that what they are reading is meant to be meaningful seems to have escaped many aboriginal readers. The reasons for this are several:

(i) Much of the material they have read has been in English, a language that at best they only partially understand. Often the reading and writing of English has been undertaken before children have been properly introduced to the language orally.

(ii) Methods used to teach literacy have encouraged students to 'parrot' material. Many have learned hundreds of words by sight but can never really read fluently because they are dependent upon memory almost exclusively. They cannot predict from syntactic and semantic knowledge because these are foreign to them.

(iii) Literacy is not a value in aboriginal society. There seems to be little point to learning how to read. It is not needed to get a job and there are few jobs anyway. Reading for pleasure is rare in aboriginal communities. The only models of good reading usually seen by aborigines are their white teachers. Reading is not an aboriginal thing but a thing that 'white fellas' do. Few homes have any books. Unlike western children aboriginal children haven't been read to at home. Books are for looking at, if you happen to find one with interesting pictures, not reading.

(iv) The majority of books are about uninteresting, nonaboriginal topics.

5. Aboriginal adult education

Most aboriginal adult education has concentrated on the teaching of practical work skills (motor mechanics, welding, carpentry, metal work, plant operation, vehicle driving, windmill erection and maintenance). There has been some work on upgrading math and bookeeping skills, form filling, basic business letter writing, typing and general clerical skills. Concern is sometimes

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expressed by aboriginal adults that, 'We need to learn to read well and do math so we can run our own communities'. The reality of the situation seems to be, however, that if the aboriginal waits long enough ('waiting long enough' being a characteristic of hunters and gatherers), the 'white fella' will do it for him. Few courses have been developed to try to enhance literacy skills in general. As I have already mentioned there is little reason if any for aborigines to want to develop literacy skills per se. In fact those aborigines who have become highly literate, the 'book blokes'[8] of the community, are often looked upon as strange, different and even not really aboriginal. In a society where it is considered bad to stand out as different from your peers, it is no wonder that few continue to develop one's literacy skills beyond a very basic elementary level.

In most schools and especially in bilingual schools there has been an emphasis on upgrading the educational standards of aboriginal teaching assistants (TA's) and literature production workers (LW's). The latter work in bilingual school vernacular literature production centres. There has been some work on improving standards of English literacy and math and in helping TA's develop teaching strategies and practical classroom skills.

A lot of work has been done with both TA's and LW's in bilingual schools on vernacular reading and writing skills. In addition to on-site courses run in community schools, there are other training institutions. Teachers colleges in at least four states run courses where traditional aborigines can qualify as teachers. There is also the government-sponsored School of Australian Linguistics (SAL) in the Northern Territory, which provides formal live-in training programs for those who want to learn to read and write their own languages and/or become LW's. Students at SAL also attempt to upgrade their English literacy skills. TA's, LW's, aboriginal teacher graduates, and students from SAL make up a very small percentage of the total aboriginal adult population. The future of bilingual education clearly depends on this group growing in size and becoming better educated (Harris, Graham and Buschenhofen, 1984). With few exceptions they are still heavily dependent on their white colleagues.

At a secular level the main interest in vernacular literacy has come through the development of bilingual schools. Some aboriginal adults have become literate so that they can work as TA's and LW's. Most of these are young people under thirty-five years of age.

Currently there are two places where, for adult groups, the social event of coming together to learn to read seems to have become meaningful and enjoyable in itself. One is an older women's class currently underway in Warlpiri; the class is being conducted by an AAB team (#22 on the map). The other is a secular-based education program in both English and vernacular at Fitzroy Crossing (#5 on the map) (Langlands, 1984. 5; Swartz,

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1985). Both classes seem to be meeting a need for 'something to do' as well as helping people to progress towards literacy. Most of those in the women's group want to read so they can read the Bible. The men and women in the second group have a variety of motivations. For both groups however, the variety and interest being provided in these classes, coupled with the social event has resulted in the literacy class becoming an important part of life.

6. Aboriginal Christianity

Despite the shortcomings of many missionaries in the past, there have been those of several generations who faithfully, lovingly and sacrificially served aboriginal people. In some areas response has been sparse, but recently there has been a powerful movement of the Spirit among aboriginal people in both traditional communities and in rural and urban fringe areas, with large numbers becoming Christian. Aboriginal churches formed in mission days, often weak and small in numbers, have been revived and new ones established. Aboriginal leaders trained by missions have now become pastors in their own right, recognized by their denominations and their people and able to lead these churches. In other places, however, there is a shortage of people able to take on leadership roles. In some places there are little or no vernacular Scriptures. Here people are forced to rely on the simple English versions like the 'Good News Bible.' Few understand English well and many misunderstandings result. In any case, in most communities the few people who can read English well enough to share the Scriptures with their people are usually women and a few young men for whom it is culturally inappropriate to take a leading role. For this reason, some groups of Christians rarely use the Scriptures. Other groups are still dependent upon the 'white fella Christian', the local teacher, community worker, missionary, or translator who can find the time to read and explain the English Scriptures so that they can understand. Very few older Christian leaders can use the English Sciptures to feed their flocks.

One can see from the map on page 26 that Bible translation work is either completed, underway or contemplated in thirty-seven aboriginal and Torres Strait vernaculars. The AAB is working in twenty-one of these and will possibly work in a further three. Through vernacular Scriptures aboriginal people may come to understand the word of God. The important questions are will they be able to read them, will they actually read them, and will they apply them in their lives?

III. Vernacular Literacy Programs

1. Branch accomplishments

Of the twenty-one languages where members of the AAB have been or are working, ten have bilingual programs of some sort in

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which we have had involvement in training TA's and LW's and have done a small amount of work with children. In none of these cases have we been entirely responsible for the work. Involvement in a few places has been intensive for a year or two and then every now and again for short periods. In all cases, however, we have been and continue to be, where needed, a catalyst and a 'behind the scenes' encouragement. In four of these languages we currently have a direct involvement.

In thirteen of the languages listed we have done some adult, vernacular literacy work. In ten of these we have made the major contribution to adult vernacular literacy for the language.

The results of our labours have not been world shattering. Where there are bilingual programs, there is a steady trickle of graduates, a few of whom are highly literate in the vernacular and continue to use their skills. Most, however, do not have a very high standard and their skills soon atrophy for want of something to read. We have been able to bring very few adults through from total nonliteracy. A larger number have transferred their literacy skills from English, some of these being TA's and LW's working in the school. Of those who are literate, few can read really fluently and even fewer could be described as vernacular authors.

In most places where we have worked, we have been responsible for the development of a small quantity of vernacular books, up to one hundred or so titles, a few primers almost all of which use the Gudschinsky approach, and some materials designed to transfer English readers to vernacular literacy.

As an example, let me summarise what has been accomplished in my own program at Jigalong in Western Australia (#3 on the map) since we began in 1979:

- -Some vernacular literacy in the school. If the present government policy in Western Australia continues there will probably not be more than one or two graduates who are literate in Martu Wangka.
- -Three TA's have moderate literacy skills.
- -Five other adults have become fluent vernacular readers. All transferred from English reading. Of the above eight, six have authored booklets.
- -Twelve or thirteen other people have attempted to learn to read Martu Wangka. At best they could be described as fair readers. Most are really battling. None were complete nonliterates when they began.
- -We have developed a literature of about sixty titles.

2. Problems in vernacular literacy

The AAB celebrates its 25th year of work in 1986. We have had some success but a lot of failure. We must face the facts.

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(a) **We don't have much time.** The process of destruction continues. Languages are disappearing fast. In some the opportunity for maximum use of Scriptures being translated has passed. In the last two years three programs have been prematurely cut short because of languages falling into disuse. As one Education Department linguist said to me, 'One morning some of these people are going to wake up and find that their language is gone'. The slide from apparent health to death can be a very rapid one. In a period of five to ten years languages can cease to be viable.

(b) **Literacy in English is not valued, wanted or seen as relevant by most aboriginal people.** English literacy is of some value on a day to day practical level in running communities but this need can be met, especially with the current level of 'white fella help', by a small group of aborigines with moderate literacy skills. Education past elementary levels requires better English literacy than most aborigines have but there are few jobs available outside the community for aborigines that require literacy or education. Most aborigines don't want to leave their communities to find employment anyway. Aborigines have not learnt to read for pleasure. In any case there are few interesting or relevant books available to aborigines. Radio, cassette, TV and video seem to be a more relevant media.

(c) **Vernacular literacy is less relevant than English literacy except to those who really want to read vernacular Scriptures.** There is little secular vernacular reading material available that can sustain the reading habit. Even the massive financial and personnel resources available to government-sponsored bilingual programs have not been able to provide sufficient literature even for successful school programs. The AAB does not have the resources and manpower to mount large-scale, secular-based vernacular literacy programs. We do not have government support to do so.

(d) **Literacy for many aborigines is seen as a 'white fella thing'**; it is associated with assimilation, schools, missions and cultural destruction. We have to work very hard to prove that vernacular literacy is different from literacy in English. Many associate literacy with failure and irrelevance. At best literacy is a nonevent, at worst a negative.

(e) **There are few good models of literacy among aboriginal people to inspire them to greater success.** In fact to stand out as better than others in aboriginal society is a bad thing. This in part accounts for the uniformly low standards of literacy in aboriginal communities (Capp, 1981).

(f) **Those who are literate tend to be women and young men. It is unacceptable for them to take leadership roles.**

(g) **We long ago had to abandon the idea of 'literacy for every aboriginal'.**

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(h) **We often used methods for teaching literacy that haven't worked even with those few who have seemed to be well motivated.** Our approaches have been 'bottom-up', sounding out or word by word approaches. They have assumed that aborigines understood that reading was meant to be a meaning-making experience, clearly a wrong assumption. We have failed to show students soon enough in the process of teaching them to read that reading is a meaningful activity and thereby we have not provided them with the motivation to persevere and make the substantial commitment of time and effort needed to reach fluency. Few of us have come to terms with the implications of the research done by Harris (1980, etc.) and Christie (1983, etc.) on aboriginal learning styles.

(i) **Those who have succeeded in literacy have been the exceptions,** mainly

- -Those who have wanted to read Scriptures.
- -Those who have transferred through from English literacy.
- -Those who were close friends, language helpers, or employees, for example those who were TA's or LW's in bilingual programs, who felt an obligation to persevere with learning to be literate.

3. Some solutions to the problems

Reading and writing are skills of which the vast majority of human beings including Australian aborigines are capable. The real problem is a motivational one. Aborigines can learn to read but are legitimately asking, 'Why should we?'

What should be our reply?

(a) We should no longer see literacy as the only or most effective way of getting Scripture into use among the majority of aborigines.

(b) We should banish from our mind the idea that we are going to achieve community-wide literacy and/or set up large secular-based culture and language preservation and/or bilingual programs.

(c) Where it is necessary we should continue, in response to the felt needs of aborigines, to commit limited time and resources to the support of others working in such programs, for example TA's, LW's and aboriginal or white teachers. We should do this because if these are really felt needs, then we are called to serve, and secondly because successful graduates may possibly be Scripture users.

(d) We must find ways to help aboriginal people see the relevance of Scripture for their lives. This is the motivation, probably the only real motivation, we can offer for vernacular

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literacy that is within our resources. Our number one priority in literacy work, the prereading approach par exellence, is to 'open the fridge', as it were, and show people the 'goodies' inside. In the western world one of the reasons our children read is because they have been shown from an early age that 'there are goodies in books and they want to get them out'. The Scriptures are full of life-essential principles that can revolutionise life, including the life of an aboriginal. It has happened!

(e) Having prepared people by showing them the value of getting into the Word we should concentrate our main efforts on those who see the relevance of Scripture and want to be able to read and use it for themselves. I don't mean by this that we should totally neglect people who want to read their vernacular for other reasons. But there are very few reasons for vernacular literacy besides reading and using the Scriptures; so I believe we should 'put most of our eggs in that basket.'

(f) Because time is short we in the AAB must concentrate mainly on those who have some chance of success:

-Those who are keen to use the Scriptures.
-Those who are already literate or semiliterate.
-Those with whom we have developed strong relationships, who have an obligation to learn to read and can see a use for reading skills.

(g) We must use strategies that

-develop reading for meaning. For example the neurological impress strategy, language experience, shared book, prediction and substantiation from whole discourse. Phonics, sounding out syllables and word analysis can develop informally out of the above or be dealt with at times separated from sessions in which reading for meaning is being taught.
-fit the cultural learning styles. The above listed do.
-fit the level and understanding of reading skill reached by the student. If the learner is an English literate or semiliterate, we need to understand 'where he is at' in his English literacy skills and then employ strategies that move him on to 'making meaning in his reading' immediately if he is not already reading for meaning.
-provide a sense of immediate success in reading for meaning. The above strategies do.
-allow for the development of oral reading as a performance skill. This is a separate skill from reading silently for meaning. The sharing of Scriptures in a culture which is basically oral and has only a small core of literates, at least for the forseeable future, depends on good oral reading skills.

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(h) We must see that there are materials available to read.
- Instructional materials should focus mainly on transfer from English to vernacular. Simple familiar Bible stories can be used, Scripture songs, testimony material, simple culture material if that is where interests lie.
- There should be enough simple repetitive, predictable material to develop reading skills, by using Bible stories or whatever people are interested in.
- Familiar, short, heavily illustrated translated Scripture passages can be used for developing fluency. Group reading and reading with a cassette provide non-threatening ways to help with fluency.

(i) To ensure that understanding of the relevance of reading is maximised, it should be used as often as possible in nonthreatening group situations. For example, group oral reading from the overhead projector or chart of a Bible passage to be studied in a group provides practice in oral reading, provides a reading instruction opportunity, reduces the likelihood of people feeling embarrassed or outdone or made to stand out. The use of relevant material in these sessions makes the business of literacy appear very worthwhile.

(j) Ways need to be found to overcome putting down authority figures, mostly older men, who are less likely to learn to read. Allowing the young people to read this 'newfangled white fella thing', and then having the older men expound the meaning and direct the drama, dance or song that develops from it seems to be a possible solution.

(k) Finally because social and relationship events are the fabric of aboriginal life, I believe we need to find ways of attaching literacy to significant social events, or perhaps we can create social events where the excuse for getting together is learning to read and write.

In the AAB we face many difficulties in getting people to read their 'heart languages', but a measure of success encourages us to continue. Sometimes things look impossible but "'Faith laughs at impossibilities and shouts, 'It shall be done'."

NOTES

1. station: the Australian name for a ranch.

2. tucker: Australian slang for food.

3. bush: unsettled wilderness area.

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4. Canning Stock Route: a trail of watering places, through the Gibson and Great Sandy Deserts in Western Australia, established by the explorer Canning. This was used when driving cattle from the stations in the North West to a southern railhead.

5. full-blood: person of full aboriginal descent.

6. licensed: to have a government license to sell alchohol.

7. Aussat: Australian Communication Satellite.

8. bloke: Australian slang for a man or a person, a 'guy'.

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NEW LITERATES READING ALOUD FOR AUDIENCE COMPREHENSION: The Bahinemo Case

Sally A. Dye, Papua New Guinea

I. Introduction
II. Background
III. Modifications in the Literacy Program for Clear Oral Reading
IV. Advantages and Disadvantages of the Modifications

I. Introduction

Reading aloud clearly is critically important in some cultural situations. When there are only a few readers in nonliterate societies, these are expected from time to time to read for others of the community, e.g. letters, reading from the Bible in church meetings. But the halting reading of new

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literates may not be conducive to clear comprehension of the message by the hearers; in fact, the meaning can be distorted. Because of such a situation among the Bahinemo of Papua New Guinea it became necessary to develop some techniques to teach clear oral reading. When there is little interest in reading and a resulting lack of fluency, and so much distortion that listeners cannot comprehend what is being read, a special technique for teaching people to read aloud clearly may be essential.

II. Background

Many nonliterate societies have little or no interest or need to read. These are most often tiny kinship-oriented tribal groups where everyone knows everyone else and all knowledge is shared. In these groups there is seldom any economic advantage to reading. There are few perceived benefits in reading or interest in a broad range of reading materials, even after the people have been encouraged to write them themselves in workshops. Some groups even perceive literacy as a threat to their cultural existence because it is associated with westernization and change. Examples of this resistance can be found in the Philippines among the Negritos, in Colombia among the mountain peoples, and among the Australian Aborigines.

In traditionally non-literate societies the few who learn to read are satisfied to stop short of being fluent readers, because fluency in reading is not a traditional value; few of the rituals require the ability to read. The few who read receive little modeling of how good readers actually read. Furthermore, preparing for religious services by reading repeatedly is often considered almost sacriligious. Some Philippine Negritos and several groups in Papua New Guinea deliberately do not prepare for services. If they do, they must act as if they did not.

Halting reading distorts the meaning for the listener. It is distorted by pauses between words, distortions of speech timing and stress, wrong tones and intonations. For example, in the Bahinemo language, the sentence stress perturbs the tones on most of the words in the sentences, so that word by word reading often distorts the meaning. In such reading each word frequently carries a sentence intonation, thus distorting the overall meaning of the sentence. In addition, meaning is lost when the pauses are so long that the beginning words are forgotten by the time the verb at the end is read. Halting reading by Bahinemo church leaders became such a problem that most Scripture reading was incomprehensible to the audience. This situation reinforced an already natural tendency on their part to believe reading is magic ritual rather than composed of meaningful words intended to be understood.

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III. Modifications in the Literacy Program for Clear Oral Reading

There are several stages in the literacy program that can be adapted to bring about more clarity in oral reading. These include orthographic changes and primer writing, as well as teaching and training teachers to teach.

Orthography and primer writing

The orthography must facilitate rapid recognition of tones, stress, intonation, and anything else that is essential to immediate recognition of the material being read.

As an example the Bahinemo language is a stress accent language where there are word, phrase, and sentence stresses. We found that word and sentence stresses must be written to avoid a lot of trial and error which would otherwise be necessary for figuring out how to pronounce the word and get the correct intonation on the sentence. Word stress is written over the vowel of the stressed syllable. The stressed syllable of the sentence is underlined. Phrase stress is not written because it's pronunciation is almost automatic when the words are pronounced correctly. This orthographic help allows the new literate to read the right sound immediately and from the correct pronunciation deduce the meaning. It is a mechanical method that leads to right meaning.

The above procedure is justified because one cannot depend on new literates being fluent enough to know or figure out the stress-accent pattern on the phrases before they know what tones are on the words. A system of writing where stress is written only on minimal pairs of words, or where all but one of the tone patterns are written would not suffice. Readers will seldom get enough experience reading to memorize the tone or stress patterns on words. Even those new literates who work most closely with us seldom learn the patterns well enough to read the passage correctly without extra orthographical helps.

The extra orthographic symbols must be taught early in the primers to build habits of reading tones or stress. The early sentences must not be so simple that they cannot be pronounced with normal intonation.

Special lessons on meaning must supplement the word-recognition technique, especially in cultures where words are used in magical rituals. Readers must be taught specifically that reading is a meaningful exercise.

The procedure for teaching clear oral reading

The goal is to teach the new literate to read by clauses and sentences in such a way that he can be reasonably accurate and his listeners can comprehend the meaning of what he says. One

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must do whatever is necessary to avoid word by word reading. Long pauses as well as intonation destroy comprehension.

A new method of teaching reading was devised. The Bahinemo were taught stress and intonation in the early lessons and encouraged to read from one period (meaning "the drying up" in Bahinemo) to the next. In further lessons, after working out the words in the sentence, the readers are taught to repeat the entire sentence with its stresses and intonation and at near speech speed. Modeling by the teacher is valuable here, but a problem where the teachers themselves are not yet fluent. Readers are then taught that after reading a sentence they should stop to breathe and to think through the next sentence. Long pauses are allowed. (The pause at the end of a sentence is useful in church for meditation.) Students are not allowed to read parts of a sentence or word by word without at least repeating the whole sentence at speech speed afterwards. Thus readers, even though they are not yet fluent readers, develop habits which make fluent performers who can read any sentence aloud with the right pronunciation and intonation.

IV. Advantages and Disadvantages of the Modifications

Advantages:

New readers can be heard and understood when they read aloud, before they have gained the kind of fluency that comes from a broad reading base.

The method can be used with most primer methods if orthography is adapted for immediate recognition.

Disadvantages:

Special teaching techniques are required. If teachers are not fluent or have not learned the technique, they have poor success in using it.

This technique has not been adequately tested, since most of the 300+ Bahinemo who will read had already learned to read by other methods, before this technique was developed. The method was appreciated, but those who try to mimic it without being taught tend to repeat in the wrong places or do not read silently the first time through. This brings new distortion.

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A COMPARISON OF ECLECTIC AND LANGUAGE EXPERIENCE APPROACHES TO READING IN A VERNACULAR PRESCHOOLS

Bev Evans, Papua New Guinea

Introduction

In March 1984, two Barai vernacular preschool classes began at Itokama village, Oro Province. Each of these classes was taught by a different reading method, and their progress and results throughout the year were closely observed and compared. Class A was taught by an analytical Eclectic Method which had been successfully used previously in the adult vernacular classes in the area. Words are broken down to syllables and vowels and then built up again to words, with only a limited amount of connected reading material introduced each day. Drills are practised daily. Class B was taught by the Language Experience Approach, following the premise that children learn to read by reading. A quantity of culturally familiar text was read daily, the emphasis being on reading for meaning without analysis.

These two methods were evaluated and the Language Experience Approach was decided upon as the method of reading instruction for future preschools.

The Barai Preschool Programme

Background: The Barai people of Papua New Guinea number about 2,000 and live in the Managalasi Valley of the Oro Province. They live in seventeen villages spread mainly along one central trail. An airstrip is located at Itokama village, which is the centre of the language group and the most prestigious village. Until recently the only access into the area was by plane or foot. An all weather road to Popondetta is in the process of construction and is presently useable in dry weather. At Itokama there is an Anglican mission station, a coffee cooperative, the only community school in the language area and a Rural Health Centre which has recently replaced the previous aid post.

Mike and Donna Olsson of the Summer Institute of Linguistics settled in the area in 1968 and began studying the language. Then in 1977 Peter and Bev Evans (also of SIL) joined them to set up a literacy programme for the area, working out of Itokama. The Olssons prepared primers for adult literacy following the method of Dr. Sarah Gudschinsky, an eclectic or analytical method widely used by SIL. Later the Evans tested these primers on two classes, one of semi-literates and one of pre-literate adults and subsequently revised them. Teachers (mainly Standard six leavers), were then trained and instruction began. Classes were held throughout the language area.

Along with literacy classes literature was produced for the new literates. Barai men were trained to write stories, reports and monthly newspapers. They were also trained to prepare stencils, operate the ink duplicator and produce booklets.

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When the adults graduated from the literacy classes, they attended a reading club, held two or three times weekly, in order to improve their fluency in both reading and writing. This programme continues.

Early in 1983 it became evident that something could be done for the children of the area, both for those who would be going to the community school as well as those who were outside the formal school system. Vernacular classes had been held weekly in the community school for several years, but the idea of commencing preschool classes in the vernacular for children who were to go to the community school seemed timely. The community and the local community school staff were approached and both groups showed enthusiasm for the idea. They were encouraged by the fact that the few children who had previously been taught to read and write in the vernacular prior to attending the community school, had achieved better results in Grade 1 than those who had not.

For many years only 5 per cent of the children from the local community school had been admitted to high school compared with around 50 per cent from the urban Popondetta schools. It was felt that attendance at a vernacular preschool might improve the children's ability in the community school and thus help compensate for the advantageous background of the urban children. Parents and the community at large were very keen for more children to go on to secondary education, in order for them to return to the village area and improve the life of the Barai. This was also the desire of many of the young people, and in fact, most of them that have had the opportunity to attend secondary school have returned to work in the area.

In the community school all instruction is in English, a language not spoken in the home and not known by the children when they first go to school. However, researchers in reading indicate that children learn to read more effectively when the language of instruction and the materials used are in the mother tongue. According to Bowers, 'Psychological and educational considerations clearly favour the learning of reading and writing in the mother tongue' (1968:385). Gudschinsky says, 'A person can only learn to read in a language he understands' (1973:6). If it is true that learning to read in one's own language is vital for good reading skills to develop, then it follows that it is very difficult for children to learn to read in a foreign language. Furthermore, if as Stauffer says, 'Meaning is the important thing - not just saying words' (1970:21), then to teach children to read in a language they do not speak or understand well, is to teach them to read words only. It will be much more difficult for them to obtain meaning from what they read, and the whole reading process will be reduced to a mechanical decoding that makes fluency and reading for meaning unlikely. This is the case for many urban and most rural children in Papua New Guinea, who com-mence school where the instruction and materials are in English.

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In Barai culture, legends are memorized and passed on from generation to generation. They are always related to life in the community and explain various aspects of life as they know it. Skills are learnt by the children observing their parents at work and imitating them.

These were some of the considerations which had to be taken into account when teachers came to decide how to introduce reading and writing skills in the two proposed vernacular preschool classes.

The Gudschinsky Approach, used previously is an eclectic approach to reading where words are broken down to syllables and vowels and then built up to words. This has been criticized by Smith who argues that, "'breaking down reading makes learning to read more difficult because it makes nonsense out of what should be sense' (1975:5). An alternative technique, the Language Experience approach to reading, concentrates on language as a whole and on the use of context to find meaning. This it was thought, may be more suitable for the Barai culture where context and memorization play such as important part in daily learning and living. But there was no evidence which would support such a supposition.

To gather such evidence it was decided to conduct an experiment during the first year of the vernacular preschool at Itokama to assess the relative appropriateness of the different methods to Barai children. One group of children would be taught by the Gudschinsky Eclectic approach and another by the Language Experience approach. The progress of the children in the two groups was to be closely observed and compared throughout the year.

In February 1984 several preschool teachers were trained and at the end of March two experimental classes, A and B, were opened at Itokama.

Classes and Teachers:

In each of the two preschool classes, twenty-two children of approximately seven years of age were enrolled so that the same number of children from each of seven villages were in each class.

There were three teachers in each class, making up two teams with one senior teacher and two trainee teachers in each team. The senior teacher of Class A, where the Eclectic method was to be tried had no formal schooling, but had attended adult vernacular classes in the early days of the Barai literacy programme. He praised the children consistently and class morale was good. In Class B the senior teacher had six years teaching experience in community schools. He was thorough, enthusiastic and taught well, and his teaching and classroom procedures were

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of a high standard. All trainee teachers had formal education to Grade 5 or Grade 6, except for one teacher in Class B who had formal education to Grade 8.

All six teachers completed an initial six and a half week training course. The new recruits were required to do a year of 'on the job' training in the classroom under the supervision of the senior teachers and the adviser, before being eligible to take responsibility for a new preschool in another village in 1985.

The teacher's guide was written in the vernacular. The pre-reading guide was fairly detailed, but preparation for the reading phase was more basic, leaving more to the initiative of the teacher.

Reading methods and testing

The school year is divided into four terms, following the community school calendar. Pre-reading was taught in the first two terms, and in the second two terms classes progressed to the reading phase, each following a different primer series and method of reading instruction.

Pre-Reading Phase: In the pre-reading phase, lessons and activities to develop the aural, oral and visual discrimination skills needed for reading were taught. Games to reinforce these skills were played daily. Other lessons taught included writing, maths, science, health and religious education. During the last five weeks of this phase, each class was taught two experience charts.

An experience chart is a village related story of eight to ten lines. The story is written on a large sheet of cardboard. A drawing at the end of the several lines aids the children's memories as they learn to read the chart story. Each of these lines is also written on separate strips of cardboard, without illustrations, so that when the children have learnt to read the chart they then transfer to reading these strips, in correct order and also in random order. From this story four or five words are then chosen and written on flashcards, the children learning to recognize the words both in context and also in isolation. Next, using these words, new sentences are built, firstly by the teacher, with the children both collectively and individually reading them, then by individual children themselves putting the words together to make as many sentences as possible.

From these two experience charts the children learnt the basic idea of reading and to recognize and use nine productive words that were to be used frequently in the beginning reading material of both classes. This helped the children's confidence and at the same time lightened the initial reading load. By the end of these five weeks, children from both classes were able to

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put the flashcard words together to make a number of different sentences.

At no time were the children bored with the pre-reading although it lasted for twenty weeks. Interest was kept high by the use of a variety of games, all of which reinforced what was taught. The games required active participation by the children, thus they did not sit for extended periods learning abstract concepts which is a learning style foreign to their culture. As the year progressed, however, the teaching did become a little more formal which was a desirable preparation for entrance into the community school the following year.

At the end of the pre-reading phase a further teachers' training course of two weeks was held where all teachers were given instruction on the teaching of the reading method that their class was going to use. At this point the trial stage of the programme began.

The eclectic method: Class A was taught by the traditional Guschinsky method using the existing series of five primers, but at a slower pace than was used with adults. These lessons began with a 'pictureable' word, called a keyword. This word was then broken down to a syllable and to the vowel in that syllable. At this point, new syllables were taught by using known letters with the new letter being taught. New and old syllables were contrasted, drilled and then other words built using the new syllables. The lesson concluded with reading a few lines of connected material. Functors, (for example, as in English: -ing, -s, -ed, and conjunctions such as: 'and', 'but', and the negative 'not') were taught differently, by putting them into meaningful phrases or sentences, then teaching them by negative focus (by omission of the functor). Games with the new syllables were added and played daily. The main teacher of this class had taught these primers for several years and knew the method thoroughly. The children took the primers home with them each day after preschool.

Language Experience Approach: Class B began the new trial reading programme where the children were taught to read using the Language Experience approach. The primers of this approach were a series of fifty-five culturally familiar booklets of graded difficulty, produced, with some assistance, by one of the teachers. The introduction of new words followed the order of the existing Gudschinsky primers, with new words being repeated as often as possible to reinforce learning. Each page of the booklet contained a sentence of the story, with a picture to illustrate that sentence. Later in the series longer sentences and sometimes two sentences were included on a page. Each booklet was a separate story varying in length from twelve to twenty-two pages. In order to give the children short term goals, every seven booklets was a complete unit, each book in that unit having the same coloured cover. The seventh booklet in

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each unit was for revision of the words taught in that unit. The last unit of six booklets (49-55) was designed to develop fluency. All booklets were duplicated on an ink duplicator so that all the children were able to keep their own copies. The children took their booklets home after class each day and were encouraged to practice their reading in their village.

The Language Experience approach focuses upon the reading of connected material. Drills are not used and language is looked upon as a whole. The emphasis is on reading for meaning. There are three main word attack strategies used. Firstly, when an unknown word is encountered the children are taught to continue reading to the end of the sentence in order to decode the unfamiliar word. If this fails, the second strategy is to look for clues in the picture accompanying each sentence. Thirdly if still unsuccessful in decoding the word, the children are taught to say the word syllable by syllable until finally sounding out the whole word. The final, but hopefully unnecessary strategy is to ask the teacher. Both word and syllable games are played each day to reinforce new words being taught.

Other Activities: Throughout the year the children of both classes were encouraged to draw and paint pictures during free play times and at other appropriate times during the morning. Even early in the year their drawings and paintings were mostly realistic and they were always encouraged to tell the teacher a story about their picture. The teacher would then write a sentence about the story on the child's paper and read it to the child. As the year progressed, the children began to write their own stories, or at least help the teacher to write them. As their ability increased, they were expected to do more of this writing for themselves. At the end of the pre-reading phase each class made two books, each child contributing one page of the book. The children took turns to take these books home and read them to their family and friends. This type of approach contributed to the children's interest and understanding of the reading process.

Children from both classes were encouraged to spontaneously read books during break and free play times. Throughout the year teachers read a daily story to the children, thus fostering an interest in books and an enjoyment in reading. Suitable books, for example, some of the Ladybird Series, several series of Papua New Guinean stories and other suitable story books were translated into Barai. The Barai text was in each case pasted over the English text.

It was observed that the teachers gained a great deal of incentive from preparing and reading their own stories to the class, and there was much spontaneous enjoyment and enthusiasm for books on the part of the children of both groups.

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Testing: Throughout the year children from each class were tested individually using identical tests. The senior teacher of each class tested the children of the opposite class, with the SIL advisor recording the results. These tests were intended to compare the effect of the two teaching methods on pupil progress in reading related skills.

A total of five tests were given during the year. The first tests were administered during the pre-reading phase, one at the end of the experience chart work and two more during the reading phase. All the individual results were recorded and compared. It was also the aim of the tests to detect weaknesses in the work in general, or in a particular child, so that remedial work could subsequently be done.

Test 1 - (After five weeks of pre-reading)

This test and also the second test covered visual discrimination, oral discrimination, writing and maths.

	Visual	Oral	Writing	Maths
Class A	88%	65%	72%	97%
Class B	89%	71%	83%	98%

Test 2 - (After fifteen weeks of pre-reading)

	Visual	Oral	Writing	Maths
Class A	96%	85%	99%	92%
Class B	100%	89%	100%	95%

Test 3 - (Experience chart work only - after 20 weeks)

This test involved recognition of each of the nine words learnt in the two experience charts and ability to read a specified sentence from the chart.

	Total Average
Class A	87%
Class B	95%

Test 4 - (After week five of the reading phase)

In this test the children were tested on the syllables they had learnt, five words they had seen in previous reading, and also five words they had never seen before, but containing known

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syllables. All of these words and syllables were presented to the children on flashcards and were in isolation. The children were also required to read a sentence containing known words, but arranged in an order they had not seen before. Finally, for dictation, each child was asked to write a sentence of reasonable difficulty, containing five known words.

	Syllables	Known Words	New Words	Sentence	Dictation
A	96%	92%	80%	90%	87%
B	86%	76%	59%	93%	85%

Here it can be seen that there was a change from previous tests as this time Class A was ahead in all areas except in fluency of reading connected material. Class A had worked daily on syllable drills and word flashcard recognition, but Class B had concentrated on reading in context only, had not drilled syllables or worked with words in isolation. Syllables and both new and known words were presented to the children in isolation for the test. (It is unfortunate that a test of comprehension was not given at this time.)

Test 5 - (Final test - at the end of the reading phase)

Here the children were tested on the syllables and were also asked to read a story of six lines. The story contained mostly known words, with three unfamiliar words that contained known syllables only. The children were then asked three comprehension questions about the story they had just read. Finally each child was asked to write a six word sentence for dictation.

	Syllables	Fluency	Word Attack	Comprehension	Dictation
A	91%	63%	68%	65%	88%
B	85%	75%	79%	91%	72%

The results of this test were fairly conclusive and predictable. The syllables were presented in isolation, but fluency, word attack and comprehension were all tested from connected material. Class A achieved better results in syllable recognition and dictation, but Class B read more fluently, showed greater word attack and comprehension skills. The most statistically significant difference was in comprehension skills.

Summary of Results

Out of the forty-four children who started at the beginning of the year, thirty-three were recommended as ready for Grade 1 in 1985, having completed the course and mastered the skill of reading. Nine were not recommended for entry to Grade 1. Their

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low performance was attributable to sickness, long absences or death. Two children were unable to read at the end of the year although they had attended regularly; both were from Class A.

The test results showed that the Language Experience approach resulted in greater comprehension and fluency. Also this method is in line with the cultural learning style of the people, which is based on mimicry and repetition.

Motivation is an important factor in learning, and the teaching of reading is no exception. With the Language Experience approach, the reading materials are culturally relevant booklets, well illustrated and greatly enjoyed by the children. As the teaching of the Eclectic Method included many drills and routine exercises and only a limited amount of connected reading material, the added motivational factor of the Language Experience method may well have been significant. This was confirmed by the teachers from both classes who all expressed a strong desire to teach by the Language Experience approach in the future. Their reasoning was that this method made reading more interesting for the children - and for the teachers.

One of the teachers who had taught adults to read by the Eclectic Method for several years, felt that the Language Experience approach should also be tried with adults and that it may increase the percentage of those who achieve literacy and are motivated to continue using their new skill. It has also been interesting to note that there has been a revival of interest and demand for adult literacy classes over recent months. We feel this is partially due to the parents seeing the reading books of the Language Experience method which the children took home each day.

It was noted, however, that Class A had a superior ability in dictation and spelling. The concentrated work with syllables and the analysis of words with the reading method of this class was probably the reason for this. So, although it was decided to adopt the Language Experience approach for future preschools, more syllable building exercises would be included along with the basic reading method. These would, however, occupy a minimal amount of time by comparison with the reading of connected material.

Conclusions

The Language Experience approach resulted in greater reading comprehension and fluency, and also, in higher motivation of both children and teachers. It produced relatively weaker results in spelling and dictation skills. Hence it has been recommended that a little more attention be given to syllable building exercises in an attempt to overcome this weakness.

The children and teachers alike are enthusiastic about the new reading method, and with the strengthening of dictation

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skills, it should provide a good preparation for entrance into the community school while enriching the lives of those children who cannot or do not wish to enter the formal education system.

Acknowledgements: I would like to express my appreciation to Dr. Robert Litteral of the Summer Institute of Linguistics, and to my husband and co-worker in the Barai programme for their advice and suggestions in the writing of this article.

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(Ed. the following details included in the original seminar presentaiton but not in the published article may be of interest to some of our readers.)

Appendix A

Test 1

1. Complete 2 pages of visual discrimination (Appendix B)
2. Supply orally words that begin the same as
   a. ume.
   b. mave.
   c. kaka.
   d. are.
3. - Match math number flashcards with the corresponding number pattern flashcard.
   - Put out counters (stones) for numbers 5, 3, 4.
4. Copy (onto a blackboard) the big and little brother of Ff, Ii, Tt, E (e has not yet been taught).

Test 2

1. Complete the page of visual discrimination (Appendix C)
2. - Supply another word that begins the same as:
   a. mare b. bara c. are
   - Which of the following words has an ending different from that of the others?
   sakie ufie abie tura madie (said orally)
   - Which word is different in the middle?
   kiri biju kaka diru madie (said orally)
3. Copy onto a blackboard the following letters:
   f, a, k, m, s.
4. Put out counters for numbers 9, 5, 3
   Find the flashcards for the following numbers: -10, 4.
5. Children were asked to read word flashcards from Experience Chart 1, and to read one of the sentences. (At this point, the chart had just been completed.)

Test 3

In this test, the children were asked to say each of the nine words learnt from the Experience Charts, and to read a specified sentence from one of the charts.

Test 4

1. Read all the syllables covered so far. (The syllables were put on flashcards.)
2. - Read flashcard words. (These words had been seen in previous reading.) makame, kari, ire, areme, kirae.
3. Read from flashcards the following new words. (All syllables in these words had been learnt.) rima, kake, ikire, make, amaeri.
4. Read the following text -
   Ame ije fu ire keke va.
   Bu kaema ke.
   Kaema ije fu ma.

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All of the words had been read before, but not in this order.

5. Dictation - Ame bu kari kaki iri.

Test 5

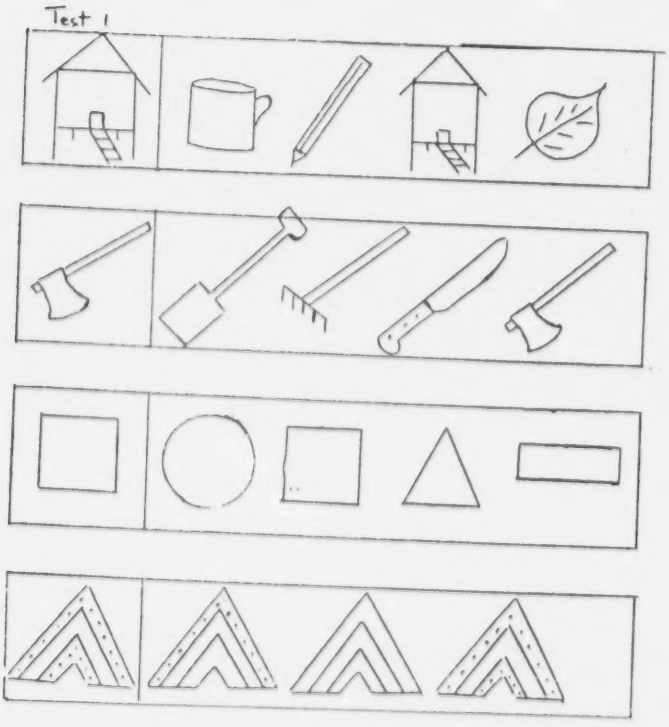
1. Test on syllable flashcards.
2. Read the following story:

   Busi ije fu mutore ije saki.
   Mutore ije fu kona oenoe.
   Ame fu keke busi ijiaki mutore nuve va.
   Mutore fu kona va ine rotire ijia aru.
   Ame fu aime ije abena fi sakae ije ru.
   Areme bu mutore ije gana kanae.

3. Comprehension. The child was asked three questions about the story just read.
4. Dictation - Gani vaekiro taubuta manino miane kania.

Appendix B

First Visual Discrimination Sheet given for Test 1



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Second Visual Discrimination Sheet for Test 1

Test 1

i	k m v i s e
r	f i n u t r s
a	b a d o g e

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Appendix C
Visual Discrimination Sheet for Test 2

Test 2

n	u m r n a n
abe	abe baru fasi isoe
mare	fare nare mare gare
iro	ira iro ire iri iro
kari	kana kani kara kari kaki

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PRIMER METHODOLOGY SURVEY

Reported by Kathy Bosscher

During the Literacy Consultant Seminar a survey was conducted regarding methods of primer making used in the SIL branches. Twenty-five of the forty-six consultants responded. The six questions of the survey and a compilation of the responses are reported, in figures and as percentages of the number of respondents.

1. Are you a primer construction consultant?

   yes 19 76%; no 5 20%; not at present 1 4%

2. Are there accepted methodologies for making primers in your branch or entity?

   yes 19 76%; no 6 24%

3. What methods are used? (% of methods used)

Letter:				Syllable: Gudschinsky			
phonics	3	4	8%	Gudschinsky	23		
Laubach	1			Robert Rice	1	28	56%
				syllable	4		
Word:				**Text:**			
psychosocial (Freire)	1			global/text based	3		
sight word	1	4	8%	language experience	2	6	12%
generative word	1			functional	1		
psycholinguistic	1						
Other:				**No Answer:**			
Eclectic	2			2	4%		
writing	1	6	12%				
misc.	3						

4. Are you free to recommend other methods?

yes	21	84%
yes, in some situations	2	8%
no	1	4%
NA	1	4%

5. What method do you normally recommend? (% of methods recommended)

Letter:				Syllable:			
phonics	2	8%		Gudschinsky	3	12	50%
				modified Gudschinsky	9		
Word:				**Text:**			
psycholinguistics	1	4%		global	1	4%	

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Other:			Not applicable:	
defined by situuation	4	5 21%	3	13%
eclectic	1			

6. What methods have you helped teams to use in primer construction?

	Closely Followed	% of 25 consultants	Adaptation	
Letter				
Phonics	4	16%	5	20%
Syllable				
Gudschinsky	13	52%	14	56%
Syllable	1	4%	2	8%
Word				
psycho-social (Freire)	1	4%	0	0%
generative	1	4%	2	8%
psycholinguistic	0	0%	1	4%
Text				
language experience	2	8%	1	4%
global	1	4%	1	4%
Other				
Orton-Gillingham	0	0%	1	4%

Observations

Fifteen different methods were identified by the consultants as methods that are used in their branches/entities. They are methods recommended or used as models for adaptation. Nine invented methods were identified: tone teaching preanalytical, syllable couplets, functor focused, one-syllable words, global preanalytical, additive discoure, functional type, activity centered and eclectic.

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Notes on Literacy

No. 54

1988

PAPERS PRESENTED AT THE MINICONFERENCE
ON VERNACULAR LITERACY AT STANFORD
JULY 24-25, 1987

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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdon Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

Academic Book Center

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
U.S.A.

EDITOR: Olive A. Shell

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STANFORD CONFERENCE ON VERNACULAR LITERACY PALO ALTO, JULY 24-25, 1987

Tom Crowell

"Why does vernacular literacy 'take' in some places and not in others?" was the central theme of an intensive miniconference which took place at the Humanities Center of Stanford University, July 24-25, 1987. The miniconference largely followed the pattern of a conference held at Stanford in 1981 on the topic of Sociolinguistic Surveys (reported in Notes on Linguistics Special Edition No. 2, July 1982) Both conferences were hosted by Stanford professors Shirley Brice Heath and Charles Ferguson.

The seeds for the conference were sown in conversations at different times between Shirley Brice Heath and various SIL people, in which we essentially said, "With all the experience that SIL has had in working with vernacular literacy it should be possible to see patterns which would enable us to predict with some level of accuracy whether or not vernacular literacy might be accepted or be rejected by a particular speech community." Initial plans for the meeting were laid in the spring of 1986 with requests going out to a small group, asking that they prepare papers. Following the pattern of the 1981 Sociolinguistics meeting, we asked people to circulate papers ahead of time so that the actual time of our meeting together could be spent in sharing reactions to what had been written.

I. Papers Presented

Five of the papers presented dealt with general principles relating to the acceptance and retention of vernacular literacy, and five presented case studies from particular languages.

1. General principles

Shirley Brice Heath in "Some VERY Tentative Principles of Literacy Retention" begins with the foundation idea that literacy

retention is much more significant for study than literacy acquisition. Much has been reported about how many people have become literate as the result of such and such campaign or such, but very little has been done as to systematic studies of literacy retention. This is true even though there is strong reason to believe that many who acquire literacy do not continue the practice for long, and even though retention, not acquisition, is what is significant for groups like SIL who want meaningful, lasting results.

She develops eight different principles attempting to define the kind of situations where vernacular literacy can be expected to be retained and where it cannot be expected to be retained. These begin with language factors and move out to sociopolitical factors. Considerable stress is placed on language awareness, with the hypothesis put forward that the greater the language awareness the more likely it is that vernacular literacy will have an impact and be retained.

Roland Walker, with marvelous timing, finished a PhD dissertation at UCLA just weeks before the conference. His title was, appropriately enough, "Towards a Model for Predicting the Acceptance of Vernacular Literacy by Minority Language Groups". Walker's underlying hypothesis is that language attitudes are at the core of the question of vernacular literacy acceptance. However, attitudes are difficult to assess. A more effective plan is to assess the observable and measurable sociolinguistic forces which shape language attitudes. This he sees as the most direct way to predict vernacular literacy acceptance.

From the extensive literature on language shift and language death he identifies significant sociolinguistic factors which appear to shape attitudes, which in turn precipitate these major changes in language use. He then hypothesizes that the factors causing language shift and language death are the same factors which hinder vernacular acceptance. These hypotheses have been tested by means of empirical data gathered by questionnaires from fifty-four vernacular language literacy programs in eight countries (all but one coming from SIL members).

Mary Morgan in "A Rationale for Language Choice in Adult Education" deals with factors involved with the decisions as to which language is to be used for what literacy functions, drawing heavily on

her experience with the Kwaio of the Solomon Islands and Tzeltal of Mexico. Of special note is her observation that a vernacular language's having a complex phonology and consequently a difficult-to-read orthography will cause special difficulties in its gaining broad acceptance.

The papers by Heath, Walker and Morgan are concerned with characteristics of language groups which favor or diminish the likelihood of vernacular literacy's being accepted and retained. The papers by Bendor-Samuel and by Bosscher, on the other hand, are written from the perspective of programs which can lead to the establishment and subsequent retention of vernacular literacy.

David Bendor-Samuel in "Factors Affecting the Successful Development of Spoken Languages into Written Ones" argues that the acceptance and retention of vernacular literacy requires the establishment of a new domain for the vernacular in written form. He explains how this may be done and explores a broad range of factors which contribute to its success or failure, in areas such as 1) the decision to try to establish a vernacular language literacy program in a language group, 2) sociolinguistic situational factors which contribute to or work against vernacular language literacy acceptance (e.g. intelligibility with other languages, bilingualism, attitude towards the vernacular and LWC, group character, and cultural changes), 3) elements essential to successful literacy programs, e.g. adequate preparation, sociological and managerial expertise, and a continuous framework for literature use.

Kathy Bosscher in "Magic Markers" deals with a point of strategy regarding how to increase the likelihood that vernacular literacy will take hold in a community. Her main point is that responsibility for the language program must be owned by the community. Such ownership can be encouraged by language workers from outside the society, especially by skillfully preparing for and handling events which mark the transition of ownership from outsiders to members of the language group.

2. Case studies

Marilyn Henne in "A Consideration of Kelman's Concept of 'Sentimental' Versus 'Instrumental' Use of Language as It Applies to the Retention of Vernacular Literacy" begins with the observation

that there has been no large scale acceptance of vernacular literacy among the Quiché of Guatemala, despite considerable efforts by SIL people to promote it. Instead, what literacy there is has been primarily in Spanish. She hypothesizes that it is unlikely that vernacular literacy will ever be used much for instrumental purposes (for getting better jobs and doing practical things). Instead, where it may have a significant impact is in sentimental, or as some term it, affective areas, such as religion, preservation of culture and the like. A further implication which may follow is that only a relatively small core group will use literacy in the mother tongue, while the majority will use literacy in the dominant language, if they use literacy at all.

Quite differently from the case of Quiché, in American Samoa vernacular literacy has enjoyed almost universal acceptance since it was first introduced a century and a half ago. Literacy in English, however, has not been accepted nearly so readily. Thom Huebner in "Vernacular Literacy, English as a Language of Wider Communication, and Language Shift in American Samoa" argues that the principal explanation for this is that reading in Samoan was quite compatible with previous oral practices and also because it was not perceived as a threat to local institutions and customs. Literacy in English, on the other hand, was alien and seen as potentially destructive to the status quo.

Charles Ferguson in "Literacy in a Hunting-and-Gathering Society: The Case of the Diyari" presents a historical study of a small Australian Aboriginal group which accepted literacy in quite a thoroughgoing way in the last century. Scripture reading and the exchange of letters are reported to have been quite commonly practiced, all using literacy in the Diyari language. In this description of Diyari literacy and more briefly in his description of Aleut literacy, Ferguson concentrates on the actual processes of literacy introduction, why it succeeded for a time and subsequently largely disappeared.

In "Literacy Among the Machiguenga: A Case Study" Pat Davis uses the eight principles developed by Shirley Brice Heath as predictors of where vernacular literacy should be expected to take hold and be retained. Using the Machiguenga of Peru she concludes that Heath's factors would, in fact, predict the high level of success for vernacular literacy which has been found among the Machiguenga.

In another study from Peru, Ron Anderson in "A Brief Survey of Vernacular Literacy in the Jungle of Peru" argues that the critical factors in the maintenance of vernacular literacy in Peru are 1) strong leadership both from inside and outside the group, which actively promotes the uses of the written vernacular and 2) an adequate number of "vernacular literacy events", i.e. occasions in which vernacular literacy can be practiced and in which such practice will be desired. This will require opportunities for reading in both religious and secular contexts.

Participants at the miniconference other than those who presented papers were Margaret Bendor-Samuel, Peggy Wendell, Dale Savage, George Huttar, Ken Gregerson, Tom Crowell, Jan Crowell and Bob Litteral.

II. Contents of this Volume

This volume and the ensuing one contains all of the papers described in the previous section except for the ones by Heath, D. Bendor-Samuel, Ferguson and Anderson, which are to be published later. One additional paper written after the conference by Margaret Bendor-Samuel is included here because of its value in synthesizing some of the main ideas discussed at the conference.

WILL THEY GO ON READING THE VERNACULAR?

Margaret Bendor-Samuel

I. Introduction
II. Why Should People Want to Read the Vernacular?
III. Which Groups are More Likely to Respond to the Introduction of the Vernacular Literacy?
IV. What Factors Will Affect the Acceptance of Literacy?
V. What Factors Must be in Place to Ensure the Retention of Literacy?
VI. Summary

I. Introduction

The stated aim of the Stanford Conference on Vernacular Literacy was to "look for a model that would help us predict which language groups are likely to be receptive to vernacular literacy and which will reject it." This matter is of great interest to SIL. We are in the business of providing vernacular literature and we are vitally concerned that its use be sustained. Most of the conference participants were members of the Summer Institute of Linguistics (SIL), although some, including our hosts, were from outside the organization. This article is a reflection on the papers that were given at the conference together with my own observations in the light of many years of interest in this subject. I am indebted to our hosts, Shirley Brice Heath and Charles Ferguson, to Thom Huebner and to my colleagues of SIL.

There is a difference between the introduction of vernacular literacy into a society and its retention over a long period of time. Both are important, but it is the retention of vernacular literacy which is at the core of all that we hope to achieve in SIL language programs. Our primary task is to develop literature, but there must also be some readers of this if we are to be successful. Experience has shown that while some language groups accept and use mother tongue literature, others see no purpose in learning to read the vernacular. In the latter case, even where some have learned to read, it seems highly likely that vernacular literature will not be used when SIL withdraws.

Is it possible to know ahead of time in which groups vernacular literacy will "take" and where it will not? If we could find such a model, it would help in decisions about new allocations as well as in planning literacy programs. Many suggestions were made regarding what needs to be in place for vernacular literacy to be retained over a significant period of time, but the conference did not try to synthesize these into a single statement. This paper presents my reflection on that topic as I have observed SIL language programs in many countries around the world. The conference papers helped me to organize my thoughts on this subject and I quote from them freely.

II. Why Should People Want to Read the Vernacular?

Marilyn Henne has found that Herbert Kelman's concept of "sentimental" vs "instrumental" use of language is very helpful as it applies to the retention of vernacular literacy. The reasons why people want to read can be summed up in these two concepts. Literacy, like language, must have a purpose. This may be functional: people may want to get better jobs, be informed, trade, etc. This we can call the "instrumental" use for literacy. Or they may want literacy because they wish to preserve their language and culture or for other personal or religious purposes. Such things are examples of the "sentimental" or affective use for literacy.

It is highly likely that for many people the instrumental value of literacy exceeds the sentimental. A largely preliterate people, for whom any sort of literacy is new, is more likely to make the enormous effort to learn to read if they can see its functional value. The maintenance of their own social system has never depended on being literate. It is only when they come in contact with another major culture that depends on reading skills that the need arises. It is not surprising, therefore, that for many language groups the need for literacy is seen as being in the language of the major culture and not the vernacular. Where the knowledge of this language is limited, some will be willing to learn to read first in their mother tongue so they can later learn in the language of wider communication (LWC). The value of learning to read the vernacular first in a transitional reading program is well attested. This, however, does not guarantee the continued use of mother tongue literature after the need for transition has passed.

It is widely recognized that in multilingual societies, each language tends to be used for specific purposes, thus establishing complementary domains. David Bendor-Samuel[2] pointed out that the recognition of language domains may help us understand the prospects for the retention of vernacular literature.

Just because a society uses its mother tongue for oral purposes in many domains, does not guarantee the sustained use of mother tongue literature. These domains may well be areas of life to which literature seems to have little relevance. Much will depend on whether or not language in written form comes to be widely used within these domains.

We have already noted that for instrumental purposes the LWC is often preferred if there is sufficient bilingualism. This is especially true if literacy has been first introduced to the society in the LWC and people have become accustomed to thinking that writing belongs to that domain. Marilyn Henne faced that problem with the Quiché of Guatemala. On the other hand, if writing is first introduced in the vernacular, without the competition of the LWC, a domain may be established in the mother tongue which can become the vehicle for both the instrumental and the sentimental uses of literacy. Ron Anderson reported that the Aguaruna wrote letters, kept records of their cooperative, wrote minutes of their meetings, etc. all in the vernacular, even after they were competent to use Spanish for these things. Thom Huebner reporting on the use of the vernacular in American Samoa, demonstrated that the vernacular writing, first introduced by missionaries in 1830, was used extensively for all purposes for many years, until American-style education and especially job opportunities depended on mastery of English.

Even though there are such examples of vernacular literacy for instrumental ends, the long-term use of vernacular literacy is more likely to be the fulfillment of certain sentimental aspirations of a community. Even where there is a choice between an LWC and the mother tongue, there are some groups that will want some literature in the mother tongue because they fear they will lose their culture and want to preserve it for posterity. This is true of the small groups of aborigines in Northern Australia. Many language groups in all parts of the world welcome the possibility of having their languages reduced to writing for cultural maintenance reasons, but there is little evidence that these alone will be sufficient reason for vernacular

literacy to take hold in the community. It is in the religious domain that vernacular literacy is more likely to flourish and continue. It is no accident that all the illustrations used by Huebner and Ferguson relate to mission-introduced vernacular literacy, and SIL programs frequently fit the same pattern. Literacy is not likely to be valued for traditional religion but where Christianity is introduced and the reading of the Scriptures in a language that can be understood is highly valued, there is a chance that a domain will be established for the use of vernacular literacy. Mary Morgan cited the Tzeltal where vernacular literacy is firmly established in the context of the church. I do not know of a situation in SIL where preservation of culture has been sufficient by itself for vernacular literacy to survive. However, Scribner and Cole have found that the Vai people of Liberia developed their own form of writing for cultural as well as practical purposes, such as letter writing and keeping of records of gift donors at funerals, etc.[3] This form of writing is still used alongside writing of the LWC learned in the schools. This development does not appear to happen often in modern times. I do know of a number of situations where the retention of vernacular literacy has come about primarily through its use in the churches.

III. Which Groups are More Likely to Respond to the Introduction of Vernacular Literacy?

There are a number of indicators, both linguistic and social, that interact with each other to give either a positive or negative indication that vernacular literacy will be accepted. These are not precise measurements and no one indicator is sufficient of itself for a judgment to be made, but when a number of factors point in the same direction they together may be an indication as to whether or not vernacular literacy will be of sufficient interest to the mother-tongue speakers that they will be prepared to promote its use.

1. Acculturation issues

All vernacular language groups fall somewhere along a continuum where the most isolated are at one end and those integrated with a major language and culture are at the other.

Isolated Integrated

|_____|_____|_____|_____|_____|

There are only a few remaining isolated groups who have no contact with a major language and culture. Some groups fall well toward the beginning of the continuum and have only slight contact with a major language and culture. Ron Anderson and Pat Davis gave examples of these from Peruvian Amazonia, but most groups in which SIL is working today have moved much further along this continuum. The degree and manner of acculturation bring about changes in the traditional culture that affect attitudes toward the use of the vernacular language in both spoken and written form.

The degree of acculturation that has taken place in a community will be indicated by the following factors:

a) Access to the dominant society. Proximity and ease of travel are almost certain signs that the group is in the process of acculturation. The indicators are navigable rivers, trails, airstrips and particularly roads. The more frequent the interchange between cultures the more likely it is that the technically stronger culture will influence the face-to-face community.

b) Economic pressure for national language proficiency--a point brought out by Roland Walker and others. Where there is a drift to the cities to find jobs or a developing trade between the dominant community and the minority language group, there is a strong likelihood that if literacy is desired it will be in the LWC and not the vernacular, especially for people outside the church.

c) History of contact with the dominant culture. The attitude of the members of the minority group toward their language and culture will be influenced by the history of contact with the major culture. Where there has been a history of domination and pressure for the minority culture to conform to the major language and culture there is likely to be a poor ethnic self- image which will be reflected in a poor attitude toward the value of their language. This is especially true of groups like the Quiché mentioned by Marilyn Henne.

d) Opportunities for and acceptance of education in the LWC. There are few more powerful agents of acculturation than a school system based on the values of another culture and using the language of that culture. Unless the school system openly promotes the use of the vernacular the domain for literacy will likely become the LWC.

e) Bilingualism. This results from contact and also facilitates more contact. Bilingualism may be restricted to sections of the community such as the traders, school children, young men who have had jobs in the city, etc. The more bilingualism there is, the more likely it will be that literacy will find its domain in the LWC rather than the vernacular. An exception to this generalization will be groups of people within the minor culture that have received an education in the LWC and now want to preserve their heritage by promoting the use of the vernacular. They are no longer striving for literacy to meet instrumental needs, but have leisure and opportunity to promote it for sentimental purposes. We have often found that these urban elite have idealistic aspirations that may not be shared by people who are still struggling to succeed. If on the other hand, there is an inadequate level of bilingualism, so that education in the LWC is difficult or impossible, sections of the community may see vernacular literacy as a transition into literacy in the LWC. Much of the motivation in the successful adult literacy programs in Ghana arose because of this possibility, and proved justified as graduates of the program competed favorably in the public primary schools.

f) Media. One of the most influential causes of language shift towards the LWC in recent years is the availability of videos and television even in remote villages. While in Malaysia recently, I was taken to see a village without electricity where the majority of the homes had TV antennas. They used car batteries to power the TVs. This development was one of a number of factors which indicated a pattern of language use which was felt not to justify the continuation of literature development. A similar situation among the aborigines of Australis is accelerating language shift so that the usefulness of a literature in some of their languages is in question.

2. <u>The presence or absence of a church within the community</u>

Because vernacular literacy is strongly tied to its sentimental uses in many communities and because the most significant literature that is available to the community is often the New Testament, the attitude of the church (if one is established) is very influential in the use of vernacular literacy. Where a church existed before the vernacular Scriptures were available and a pattern of using the Scriptures in the LWC or some other "church language" has been established, it may be impossible to establish a new domain for the vernacular. This is especially true where the clergy are not from the

same language area or feel threatened by the Scriptures in the language of their congregation. In an increasing number of churches, the congregation is made up of speakers of a number of vernaculars and they need a common language for worship. There are churches, however, that are very favorable to the use of the vernacular Scriptures and hymns, even though another language has always been used in the past. Here vernacular literacy can flourish alongside literacy in the LWC. History in Europe supports the thesis that the church is one of the most powerful vehicles for vernacular literacy.

Where no church exists, and where there is little bilingualism and there is little or no competition from the LWC when vernacular literacy is first introduced, retention is more likely. Ron Anderson and Pat Davis reported the vigorous use of vernacular literacy among the Machiguenga and the Aguaruna of the Peruvian Amazon, for all requirements as well as for church purposes. These were vigorous language groups still largely isolated from direct contact with the major Peruvian culture and responsive to opportunities for bilingual education and community development. In both societies there were strong indigenous churches which used the vernacular in worship as well as for the reading of Scriptures. Whether or not the vernacular would have continued without the church we do not know. It does seem somewhat easier to establish a domain for vernacular literacy in language groups that are only just beginning the acculturation process and where a church is established that values the vernacular.

3. Linguistic awareness

Shirley Brice Heath suggested that some language groups are more linguistically aware than others and these are the ones that are more likely to respond to the opportunity for vernacular literacy. The good response to vernacular literacy in language groups in Ghana is partially due to the high value those societies have for oratory, proverbs and the passing on of information to future generations. Added to these features Heath suggested that the ability to make puns and jokes and the awareness of "bits" of their language was another indicator. She also mentioned that groups that make requests for clarification such as "You said xxx, what I think you mean is yyy" are also likely to be more responsive. Another indicator of literacy acceptance might be the ability of people to give clear sequenced explanations and instructions. There were no illustrations of where these factors had been found but they seem to be worth

noting for further study. Huebner says of the American Samoans where literacy thrived, "Verbal creativity was evidenced in their everyday use of puns, proverbs and similes as well as in the highly stylized formal speeches of ceremonial occasions."

4. Cultural integrity

David Bendor-Samuel commented on the importance of this. Only a people who feel their language and culture have a significant future are likely to want to read a literature in it. Language groups that are small in number and/or in an advanced state of disintegration through acculturation are less likely to take to a vernacular literature. Indicators of this cultural cohesion will be the number and distribution of persons who speak their language. The speakers should include both sexes and all age groups and people from all walks of life and sections of the community. Such is the case among both the Aguaruna and the Machiguenga, where cultural cohesion and success in vernacular literacy have gone hand in hand.

In contrast with cultural integrity is cultural disintegration. Indicators of this are both linguistic and social. They include the rate of change in the use of the vernacular language in the society, indicated by increasing bilingualism and language shift to the LWC without establishing clear domains for each language. Where the vernacular has a secure domain within a bilingual society there is a chance that it might be established as a written language, given other favorable circumstances. But where both languages are used interchangeably and especially where children are being taught the LWC in the home, the vernacular is unlikely to survive in a written form.

Social signs of cultural disintegration are seen in the breakup of family life, disrespect of community leaders by young people, and the loss of ceremonies and civil strife. These may be accompanied by a level of drunkenness and immorality that would normally not be expected within the community. In such a state it is difficult to find enough enthusiasm for literacy in any language.

IV. What Factors Will Affect the Acceptance of Literacy?

Literacy will never be retained unless it is first accepted. The first part of this paper has reviewed situations where vernacular

literacy might be sustained and where it is unlikely to be so. Even where the local conditions are favorable there must be a variety of conditions fulfilled before it will be accepted. The following factors were cited by David Bendor-Samuel in his paper. None of these factors of themselves will ensure its retention but they will all contribute to it.

1. Adequate language studies and publications. This factor is one which would be readily expected in programs by our SIL teams. One of the most valuable contributions SIL can make to a language group is to do the research and analysis necessary in order to give those people the opportunity of developing a literature. It is not unusual to find that inadequate analysis or inappropriate orthographies have hindered the acceptance of literacy. Ease of reading is another factor. Mary Morgan who has had much of her field experience in Mexico, reported that even where correct orthographies existed, if they were much more difficult than Spanish the difficulty often proved to be a deterrent to literacy in the vernacular. She mentioned tone marks, especially the marking of tone with numbers, long words and morphophonemic changes as things that have proved a barrier to the acceptance of literacy.

The commitment of the linguist is essential in the project. Ferguson wrote of the role of the missionary-linguist in both the Aleut and the Diyari. He says, "In each case the missionary was committed to the use of the local language and learned to speak it with considerable fluency. In each case he produced several books in the language which could be used immediately in the community and he wrote a grammar and dictionary as tools for teaching and research. In each case the missionary-linguist spent at least ten years with the people and lived among them with his family and other mission staff. Finally in each case the missionary was fascinated by the local culture, studied it thoroughly, and wrote copious notes on it."

2. Government or provincial approval. The fact that government or provincial approval is forthcoming affects the attitudes of the language group toward their own language. It can also provide the infrastructure and finances for purposeful implementation of the program. In Peru the bilingual schools that were sponsored and financed by the government went a long way toward establishing

vernacular literacy as a community value in a number of language groups.[4]

3. Mother-tongue speakers sharing the responsibility of decision making and implementation of the program. Kathy Bosscher's paper spoke to this issue. Ownership of and participation in the development of their own language and literature is a necessary prerequisite for the acceptance of a written language, especially in the current climate of world opinion. There are few in SIL that would not agree with this statement but sometimes we find difficulty in knowing when an idea has been accepted by members of the community. Bosscher describes how one can know.

4. Sociological and managerial expertise. Literacy for a language group seldom happens by accident. Even when the factors are favorable there needs to be careful and purposeful implementation of an appropriate program. Ron Anderson focused on this issue. In reflecting on the reasons why some programs in the jungles of Peru were more successful than others, Anderson listed energetic salesmen--like SIL workers--as the number one reason why these programs flourished and literacy has been established as a value. Where SIL workers were less skilled or had less energy, programs have withered and died. In accounting for the success of vernacular literacy in Samoa, Huebner quotes Spolsky et al. 1983.[5] He lists five conditions needed for the successful introduction of vernacular literacy. One of these is "support of the maintenance of vernacular literacy by a powerful educational system under local control". Bendor-Samuel speaks of an infrastructure or framework along which literacy can spread. Success in literacy depends on the people who are implementing it.

V. What Factors Must Be in Place to Ensure the Retention of Literacy?

There are two essentials to the retention of vernacular literacy even when it has been established as a community value.

1. An established literature and the ongoing production of literature that meets the needs of the people. Sarah Gudschinsky once said, "Who would want to learn to swim if all the water they had was in a bath tub?" Without adequate literature people will not want to read or continue to read.

2. A continuing, ongoing, culturally relevant framework which facilitates the repeated use of literature and encourages discussion and interaction. Shirley Brice Heath expressed this idea as follows: "Once some members of a society acquire literacy skills, at least two conditions must be present for literate behavior to be retained and to achieve transforming power: 1) opportunities for talk about information from written materials and 2) institutions--other than the family and the school--that ensure the continuity of such occasions for talk."

While we have been aware of the first essential for many years, I believe the second needs greater focus. Unless there is a framework where vernacular literature is used and discussed continually, it will not survive. There may be political or even social frameworks that provide this but in my experience the most successful for the retention of vernacular literacy is a church that values the mother-tongue Scriptures and encourages their use. The repeated reading of Scripture, discussion of the text in Bible studies and Sunday School preparation, the opportunity of preaching and teaching that depends on the study of Scripture and the repeated use of hymns, provide the ideal institution where vernacular literacy can flourish.

VI. Summary

In this paper I have looked at a number of factors that affect the retention of literacy, drawing freely on the papers given at the Stanford conference. While situations are complex there does seem to be a pattern emerging and I believe it is true to say that establishing a domain for vernacular literacy is more likely to be possible where:

-a culture is still depending on its own language for most communication,

-leaders of the language group perceive its usefulness,

-there has not been a severe fracturing of the society's framework and values,

- a domain for literacy has not already been established in the LWC, and

- there are Christians who are anxious to read God's Word in a language that they can understand.

There will be many literacy programs, however, where vernacular literacy will prove to be only a transition into the LWC and may outgrow its usefulness to the community in time. In others, vernacular literacy may be established for a while in the wider community but will remain only in the church context alongside the Scripture in the LWC. The factors that determine the persistence or retention of vernacular literacy are complex, and those that I have listed need further examination against more data. As we add to our knowledge we will come nearer the model for which we are looking and have more realistic expectations for literacy programs.

NOTES

1. A similar paper is to appear in READ Magazine following a seminar on this topic given by the author in Papua New Guinea, August 1987.

2. Factors affecting the successful development of spoken languages into written ones. Paper to be published in L'Association Internationale de Linguistique Appliquee (AILA) proceedings.

3. Scribner, Sylvia and Michael Cole. The psychology of literacy. 1981.31-32.

4. A surprising conclusion of Roland Walker in a study of over fifty SIL programs is that government support is not an important factor. I would think this needs further study.

5. Spolsky, B., Engelbrecht, G. and L. Ortiz. 1983. Religious, political and educational factors in the development of biliteracy in the Kingdom of Tonga. Journal of Multilingual and Multicultural Development 4.459-69.

~~TOWARD A MODEL FOR~~ PREDICTING THE ACCEPTANCE OF VERNACULAR LITERACY ~~BY MINORITY-LANGUAGE GROUPS~~

Roland W. Walker

I. Introduction
II. Method
  1. Criterion Variables
  2. Predictor Variables
  3. Analytical Procedures
III. Results
IV. Profiles of High-acceptance Communities
V. Conclusions
VI. References
VII. Appendices: A - C. Tables
  D. Questionnaire

I. Introduction

To whatever degree it is possible, being able to predict the receptivity of a community to a vernacular literacy program, before it is initiated, would benefit both SIL administrators and field workers. The high cost of developing a vernacular language (VL) for literacy (in terms of time, money, and personnel) and the large number of minority languages in the world (over 5000) are two reasons we would like to predict the degree to which a community will accept VL literacy before a program is initiated.

Another compelling reason is that the world had changed since SIL began work in Mexico in the 1930's. Today there are other options to the maxim "to each in his own tongue wherein he was born." The spread of national languages (NL) and the extension of basic education to minority-language groups (usually through the medium of NLs) is giving increased access to NL Scriptures. Increased contact with modern societies is inevitable for minority-language communities at the end of the twentieth century, as is growing economic pressure for NL proficiency. Thus, research into the question of which factors influence a community's choice of language/s for literacy is essential for using our resources wisely.

This study represents some first steps toward developing a model for predicting VL literacy acceptance, based on sociolinguistic factors

that are observable prior to the commencement of a VL literacy program. The analysis of the data in this study supports the assertion that it is possible, to some extent, to predict VL literacy acceptance by assessing certain social factors. A working model for predicting the probability of communities accepting VL literacy is still beyond our reach.

A. The question

It is obvious that some minority-language communities have accepted VL literacy to a greater extent than others. In Guatemala, for example, the Chuj people have readily accepted literacy in the VL (Williams, 1981), while the Quiché have shown little interest, despite nearly thirty years of VL literacy promotion (Henne, 1985).

The differences in response to VL literacy are not just due to a lack of motivation for literacy. Motivation for literacy is essential for its acceptance, but even if a community has motivation for literacy, it may choose to use the NL rather than the VL for most literate functions.

Even though the VL fulfills major functions for spoken use, it may not be perceived as appropriate for written use. In diglossic situations, for example, certain functions of literacy (e.g. government, education, and religion) are the domain of the High language (i.e. the NL), and other functions (e.g. personal correspondence, record keeping, and reading for pleasure) are fulfilled by the Low language (i.e. the VL). In such cases, promoting the use of VL Scriptures in church (i.e. a High function) goes against established norms of language use in the community.

Some have looked for explanations of the non-acceptance of VL literacy in terms of technical or organizational design or other factors under the control of the promoters of VL literacy, e.g. orthography, amount and type of literature produced, etc. (W. Walker, 1969; McDermott, 1983). Other researchers, in contrast, have focused on sociolinguistic factors that predispose a community to accept or not accept VL literacy. (Spolsky and Irvine, 1982; Brandt, 1981; Scollon and Scollon, 1981; Henne, 1985)

This study examined data concerning literacy programs in 54 different communities to answer the question: "Which sociolinguistic

variables best predict the acceptance of VL literacy among minority-language groups?"

B. Hypotheses

Written language, in contrast to oral language, is an innovation--a type of language spread--that is subject to the acceptance or rejection of a community. Some communities accept VL literacy with open arms. For others, it is perceived as unnecessary or unwanted. We cannot assume, then, that communities which have positive attitudes toward oral use of the VL will accept literacy in the VL.

My underlying hypothesis is that language attitudes are at the core of the question of VL literacy acceptance. Language attitudes are "agendas to action" (Rokeach, 1968), which predispose a community to accept or reject VL literacy. VL literacy promoters, therefore, can do all the right things, in terms of program design and implementation (W. Walker, 1969; R. Walker, 1985), and still the target community may not accept literacy in the VL.

If we could accurately assess language attitudes, we would be well on the way to predicting VL literacy acceptance. Attitudes toward language, however, are difficult to evaluate, especially for a survey team whose time in a minority-language community is quite limited. (See R. Walker, 1982c.) Sociolinguistic forces at work in a community are what shape language attitudes, and these factors can be evaluated much more readily than the attitudes they influence, since they are observable and measurable. Therefore, it is my hypothesis that assessing the sociolinguistic factors that shape language attitudes is the most accurate way to predict VL literacy acceptance.

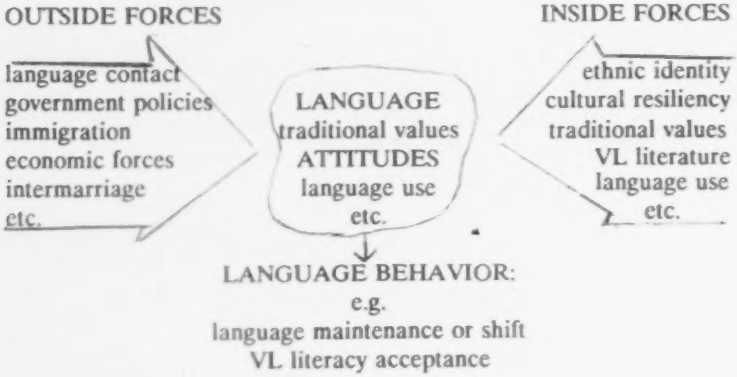
C. A model for assessing language attitudes

Sociolinguistic factors are the causes of language attitudes and patterns of language use are the resulting effects of these attitudes (Henne 1985.125-26). Existing patterns of language use also tend to shape language attitudes, since the status quo tends to perpetuate itself (Drake 1984.16). Therefore, language use can be viewed as both a cause and a result of language attitudes. It is useful to characterize the sociolinguistic forces that shape language attitudes as those which originate outside the community and those that typically come from

within the community, as in Figure 1. (See R. Walker, 1982c, for a fuller explanation.)

From the literature of language shift and language death, we can identify a constellation of recurring sociolinguistic factors that shape language attitudes, which, in turn, precipitate these major changes in language use. (Hollyman, 1962.313; Wurm, 1966; Gal, 1979; Dorian, 1981; Heath, 1972; Hill and Hill, 1977; Adler, 1977; Timm, 1980; Ohannessian, Ferguson, and Polome, 1975.39; Guyette, 1975; Edwards, 1985.50, 163).

Figure 1 Social forces shape language attitudes, which,in turn, determine language behavior.



Economic pressures for proficiency in the NL, government policies unfavorable to the development of VLs, increased contact with the NL and culture, and immigration are forces that originate outside the community, and influence language attitudes in a way that commonly results in language shift. Negative ethnic identity (i.e. a concept for a group which parallels poor self-image for an individual), a lack of VL literature, and patterns of language use in which the NL takes on societal functions and values which were once the domain of the VL (Fishman, 1968.35) are forces inside the community that tend to produce attitudes that devalue the VL in the face of contact with the NL (or some other language of high status).

Following McDermott (1983), I consider these social forces, which tend to devalue the VL and commonly accompany language shift, as "failure factors" which hinder the acceptance of VL literacy. The cumulative effect of several hindering factors co-occuring is that VL literacy is not accepted by the community.

The factors, which I expect to be most significant in hindering (i.e. have a significant negative correlation with) VL literacy acceptance are the following: 1) high contact with the NL (or regional language) as evidenced by a) close proximity to a town where the NL is widely spoken, b) a high degree of intermarriage, c) high presence of nonnatives (i.e. nonVL speakers) in the community, d) high NL proficiency, e) a high level of education, and f) a large percentage of VL readers who first read the NL; 2) strong economic pressure for NL proficiency, as evidenced by a) large numbers leaving the community to find work, b) a perception on the part of the community that the NL is important to economic advancement, and c) a high percentage who need the NL for their employment; 3) attitudes and policies of governments and their officials which are not supportive of VL literacy; 4) negative ethnic identity accompanied by negative attitudes toward the VL; 5) patterns of language use in which the NL is dominant in most domains.

II. Method

In order to test the hypothesis that the same sociolinguistic factors which contribute to language shift also hinder VL literacy acceptance, empirical data on 54 VL literacy programs from eight countries was gathered by means of a questionnaire. In all but one case, the respondents were field workers of the Summer Institute of Linguistics (SIL), who had actively promoted VL literacy in the target communities. The unit of analysis in this study was a single community (not the entire minority-language group). Each community represented a different minority-language group.

I view VL literacy acceptance as a form of language spread, defined by Cooper (1982.6) as "an increase, over time, in the proportion of a communication network that adopts a given language or language variety for a given communicative function." This study examined the spread of reading (a communication function) to a minority-language community (the communication network). Cooper has specified a four point scale which indicates the degree to which a

behavioral innovation has pervaded the communication network (1982, p.11-12): awareness, evaluation, proficiency, and usage. These represent logical stages in the acceptance of the innovation of reading. Before a community can put a value on VL literacy, it must first be aware that it is an option. A positive evaluation of VL literacy is the first level of acceptance and naturally precedes proficiency and usage. VL reading proficiency implies a positive evaluation, and usage of VL literacy requires proficiency.

A. Criterion variables

In this study, VL literacy acceptance was measured in following ways, corresponding to the last three points on Cooper's "scale of behavioral pervasiveness":

1. The percentage of the population who have purchased VL literature. This variable represents the notion of evaluation of VL literacy.

2. Reading ability. The percentage of the population who can read narratives in the VL with understanding is a measure of proficiency.

3. Informal usage. The practice of reading the VL in informal settings is a measure of usage of the innovation. This variable is the percentage of the population who spend time reading weekly in informal settings (i.e. outside school and church).

4. The usage of VL Scriptures in churches. This variable was the frequency of reading VL Scriptures aloud in church services.

These measures of VL literacy acceptance were oriented to functions of sacred text literacy, since this was a major focus of the VL literacy programs under study. Since the most straightforward relationships of predictors to measures of VL literacy acceptance were with criterion one (purchase of VL literature) and four (usage of VL Scriptures in church), I will limit my discussion of the results of this study to these two criterion variables.

B. Predictor variables

The factors considered for predicting VL literacy acceptance fell into three major categories: program variables, which are under the control of the promoters of VL literacy, sociolinguistic variables, which are inherent in the community, and therefore not under the control of the promoters of VL literacy, and orthographic variables, which are partly under the control of VL literacy promoters and partly determined by the structure of the language. (These categories were suggested by Bolyanatz, 1986.11, using slightly different labels.)

Since my goal in this study was to develop a model for predicting VL literacy acceptance, my primary interest was in those sociolinguistic factors that can be assessed before a VL literacy program is initiated. However, I also considered programmatic and orthographic factors, in order to account for their influence.

The predictor variables which had significant relationships with VL literacy acceptance were as follows: (Note: Referring back to this section will be helpful when reading the Results section.)

Contact with the NL (1-6)

1. Distance from a town where the NL is widely used.

2. Intermarriage with non-VL speakers. This variable was the percentage of homes in which one spouse is not a mother-tongue speaker of the VL.

3. The percentage of homes where people live who are non-natives in the community (and therefore do not speak the VL).

4. An estimate of the average NL proficiency in the community, on a scale similar to the one used by the Foreign Service Institute.

5. The average number of years of formal education completed by adult males.

6. The percentage of VL readers who were previously reading the NL.

Economic pressure for NL proficiency (7-9)

7. The trend toward leaving the community to find employment elsewhere.

8. The importance of NL proficiency to economic advancement, as perceived by the people in the community.

9. The percentage of adults who need speaking proficiency in the NL for their occupations.

Government attitudes

10. The attitude of local government officials, who are not VL speakers (e.g. school teachers or whoever is most influential in the community), to the development and use of the VL for literacy.

Language use

Spoken language use in the domains of 11. Church, 12. Occupation, 13. School and 14. Singing.

Religious makeup

15. The percentage of the community who aim at living by the Bible.

Orthographic variables

16. VL orthography differences. This variable was scored as the number of different symbols (or completely different values for symbols) in the VL orthography as compared with the NL orthography.

17. Ease of reading the VL (as compared with the NL).

Programmatic variables

18. Community leaders' involvement in orthography decisions.

19. Community leaders' involvement in other aspects of the VL literacy program.

C. Analytical procedures

Pearson correlations were calculated pairwise for all of the variables using the Crunch Interactive Statistical Package. Multiple regressions were also calculated on two of the four criterion variables. The findings of in-depth interviews with four of the respondents to the questionnaire and my own observations of VL literacy programs in Mexico and Indonesia guided the interpretation of the quantitative results.

III. Results

The results of this study support the hypothesis that high contact with the NL, economic pressure for NL proficiency, negative attitudes of government officials toward development of the VL, and patterns of language use in which the NL is dominant are hindering factors to the acceptance of VL literacy.

Statistical relationships do not imply cause-effect relationships, but the following relationships do support the hypothesis that social forces shape language attitudes, which, in turn, influence the acceptance of VL literacy. Following is a discussion of each of the significant predictor variables from the perspective of their being hindering factors in the acceptance of VL literacy.

A. Contact with the NL

The greater the contact a community had with the NL, the greater the hindrance to VL literacy acceptance, as demonstrated by the following specific variables: The closer a community was to a town where the NL was widely spoken (e.g. the less distance from a town, predictor 1,) the less VL literature was purchased (criterion 1). The greater the percentage of nonnatives in the community, predictor 3, and the greater the NL proficiency, predictor 4, the less VL Scriptures were used in church (criterion 4). The higher the level of education, predictor 5, and the percentage of VL readers who were previously reading the NL, predictor 6, the lower the acceptance of VL literacy, based on both criteria one and four.

B. Economic pressure for NL proficiency

The data substantiated the hypothesis that economic pressure for NL proficiency hinders VL literacy acceptance. The greater the trend toward people leaving to find employment outside the community (predictor 7), and the more people needed to speak the NL in their occupations (predictor 9), the less frequently VL Scriptures were read in the churches of the community. These same two predictors, along with importance of NL proficiency (predictor 8) were also hindrances to the purchase of VL literature (criterion 1).

C. Attitudes and policies of government toward the VL

Unfavorable attitudes of local government officials (predictor 10) tended to hinder the acceptance of VL literacy. However, there were no significant relationships between the predictor official policy of the government toward development of the VL for literacy and any of the measures of VL literacy acceptance. This was due, no doubt, to the fact that current policies were examined, rather than the history of policies regarding the VL.

Henne (1985) and Heath (1972) point to the centuries-long policies in Guatemala and Mexico that caused the VL to be devalued in the attitudes of the indigenous peoples. The effects of such government policies on language attitudes continue long after the policies are changed. Examining the history of government policies regarding the VL, though more difficult to ascertain for each community, would probably have produced more significant results.

D. Ethnic identity

The biggest surprise in the results of this study was the lack of any significant relationship between ethnic identity and VL literacy acceptance. This was probably because the concept is difficult to assess in the field, and the respondents may not have understood the concept or been observant of the indicators of ethnic identity. Furthermore, assessments of ethnic identity are quite relative. Therefore, field workers lacking experience in more than one community would have had difficulty evaluating ethnic identity.

E. Language use

The dominance of the NL over the VL in the domains of church, occupation, school, government, and singing hindered the acceptance of VL literacy. The strongest language use predictors--and strongest of any of the predictor variables--were the domains of church and singing.

As would be expected, the less the VL was used in church orally, the less frequently the VL Scriptures were read in church (criterion 4) and the less people purchased VL literature (criterion 1). Inversely, greater oral use of the VL corresponded to greater written use of the VL. This would be the classic situation of an indigenous church eager for the Scriptures in the VL.

Singing is a very affective domain. The data reveal that communities which tend to prefer the NL for singing tend to have lower evaluations of VL literacy (criterion 1) and less usage of VL Scriptures in church. (It is not known, however, if the responses on the questionnaire reflected the use of the VL for singing throughout the culture or just in church, since the question did not specify. This would be a fruitful area for further study.)

The more that the NL is used in the school classroom and on the job, the less the community purchased VL literature (criterion 1). Admittedly, the measurement of language use elicited by the questionnaire was very crude. The results, however, confirmed the hypothesis that greater use of the NL in domains of high affect hinder VL literacy acceptance.

F. Religious makeup

Since the VL literacy programs under study all had strong emphases on reading the Christian Scriptures, it was important to examine the relationship of the communities' religious makeup to VL literacy acceptance. For the data in our sample, the greater the percentage of committed Christians in the community (i.e. people who aimed at living according to the principles of the Bible), the greater the acceptance of VL literacy. Conversely, a low regard for the Bible was a hindering factor to VL literacy acceptance.

G. Orthographic variables

VL orthography differences proved to be a significant hindering factor to the acceptance of VL literacy. Besides actual differences in the orthography, the perception on the part of community members as to the relative ease of reading the VL as compared to the NL was significantly related to VL literacy acceptance. The more difficult the VL was to read, as compared to the NL, the less people purchased VL literature and the less VL Scriptures were used in churches.

H. Programmatic variables

Lack of community involvement in the VL literacy program, both in orthography decisions as well as in other aspects of the program, was a hindering factor for VL literacy acceptance in the communities surveyed. Community involvement had one of the strongest relationships with VL literacy acceptance of any of the variables examined in this study.

IV. Profiles of High-acceptance Communities

Multiple regression analysis was used to ascertain the combined effect of several variables at once on VL literacy acceptance. This technique is used because some variables overlap or neutralize each other in their effect on predicting a criterion variable (e.g. VL literacy acceptance). Based on the regression analysis, the following profiles emerged of communities which accepted VL literacy to a high degree:

Considering only sociolinguistic factors, communities which highly valued VL literacy (as indicated by purchase of VL literature, criterion 1) had a high percentage of people who aimed at living according to the Bible, were less educated, and were farther away from a town where the NL was spoken widely.

When the programmatic variables are considered along with the sociolinguistic variables, a different profile emerges of the community which highly values VL literacy. Community involvement in the VL literacy program, coupled with a VL component in the formal education offered in the community, in large measure accounted for the degree to which the community purchased VL literature. The

absence of economic pressure for NL proficiency (importance of NL proficiency) also contributed to a high evaluation of VL literacy.

Considering the use of VL Scriptures in churches (criterion 4), the following profile emerged: Communities which scored high on this criterion are characterized by strong use of the VL in domains close to the heart (e.g. church and singing). There is little need to speak the NL in daily life because the population is ethnically homogeneous and there is little economic pressure for using the NL. Adding orthographic variables to our consideration, ease of reading the VL (as compared to the NL) is an important factor in the profile of a community in which VL Scriptures enjoy high usage in churches.

V. Conclusions

This study has demonstrated that there are significant relationships between measures of VL literacy acceptance and the same sociolinguistic forces that are related to language shift and language death. We can safely infer that language attitudes are the common links (i.e. intervening variables) between these forces and the language behaviors of both language death and VL literacy acceptance. The results of this study, therefore, have confirmed the approach of evaluating the forces that shape language attitudes, rather than trying to assess the attitudes themselves, for the purpose of predicting the acceptance of VL literacy.

The sociolinguistic variables which best predict vernacular literacy acceptance are the same variables that influence language shift and language death. Although our model of predicting VL literacy acceptance has not matured far enough to accurately predict how readily a community will accept VL literacy, it is clear that the factors described below will definitely hinder acceptance of VL literacy. Norms will need to be constructed for each country and/or region in order to apply a model for predicting VL literacy acceptance.

A. Insights for planning VL literacy programs

The following insights come out of this study, both for those who wish to evaluate the potential acceptance of VL literacy in a community before initiating a VL literacy program and for those who are already engaged in VL literacy work among a minority-language

group. Since the purchase of VL literature (an evaluation of VL literacy) is logically and temporally the most important criterion to consider, it will be the focus of the following recommendations.

Since our perspective has been that of identifying hindering factors, this model is not as useful for predicting the acceptance of VL literacy as in identifying those communities in which VL literacy would meet with lack of acceptance. This is because, even if there were no hindering factors present, motivation for literacy in any language may be lacking, Those who wish to evaluate the likelihood of a minority-language group accepting VL literacy before initiating a VL literacy program, should take into consideration the following sociolinguistic, orthographic, and programmatic factors: (These factors could readily be assessed during an initial language survey in the community.)

1. Contact with the NL

Greater contact with the NL tends to hinder VL literacy acceptance. Factors contributing to contact with the NL (listed in order of their strength in this study) were as follows: close proximity to a town where the NL is spoken, education using the NL as a medium, and previous reading ability in the NL. Other measures of contact with the NL, such as use of radios and TVs and access to various means of transportation, should also be examined.

2. Economic pressure for NL proficiency

Economic pressure for NL proficiency also hinders VL literacy acceptance. The following factors contributing to economic pressure were used in this study (listed in order of the strength of the zero-order correlation): the perception by the community that NL proficiency is important to economic advancement, the percentage of men in jobs that require them to speak the NL, and the rate at which people are leaving the community to find employment elsewhere. Economic pressures exert powerful forces on language attitudes. Therefore, other creative ways to measure those pressures should be examined carefully.

3. Language use

If the spoken NL dominates church services and singing, there will be resistance in the community to VL literacy. The greater the dominance of the NL in highly affective domains, the lower the acceptance of VL literacy we can expect. (See Marilyn Henne, in the next volume, for further discussion of affective domains of literature use. See Walker, 1982b, for ideas in how to overcome the observers' paradox in assessing language use.)

4. Percentage living by the Bible

If the Christian Scriptures are to compose a major part of the VL literature produced, a situation in which a low percentage of the population aim at living according to the Bible will hinder the acceptance of VL literacy.

5. Language structure

Difficulty in reading the VL (due to great orthographical differences as compared to the NL) was related to nonacceptance of VL literacy. Therefore, if the structure of the language being considered for a VL literacy program is so different from the NL as to make a complex orthography unavoidable, language planners can expect the orthography to be a hindering factor.

6. Community involvement

The way in which VL literacy promoters involved the community in the program (in addition to the sociolinguistic forces which influence language attitudes) greatly influenced the degree to which VL literacy was accepted. Therefore, lack of community involvement in a VL literacy program is a hindering factor of high magnitude.

Potential for community involvement will be difficult to assess before a VL literacy program has been initiated, because, in many cases, VL literacy is an unknown option. If the members of the community are aware of a VL literacy program in some other community, they may have formed attitudes toward VL literacy, which can be assessed is some way. A commitment of active involvement in the program by community leaders could be one indicator of VL literacy acceptance. (Such a commitment is expected

before the Bible Translation Association of Papua New Guinea begins a project.)

B. Suggestions for facilitating VL literacy acceptance

For communities in which a VL literacy program is already in progress, literacy workers should recognize that the social forces discussed above have a powerful influence on VL literacy acceptance. These factors can be monitored to discern trends that will influence the community for or against VL literacy, thus facilitating further planning. In order to reduce hindrances and facilitate acceptance of an ongoing VL literacy program, attention should be given to the following factors:

1. Orthography

Whatever can be done to make the VL orthography look like the NL orthography will aid VL literacy acceptance, since the prestige of the VL will be enhanced the more it resembles the NL orthographically. This is especially important in cases where potential VL readers have already learned to read the NL. (It is recognized that, in some cases, the NL may not be the optimal model to emulate due to other loyalties.)

Ideals of producing a purely scientific alphabet must be sacrificed, if need be, for the higher priority of developing an orthography that is accepted by the people and used. Ease of reading for the linguist and notions of elegance must also be sacrificed for the priority of community acceptance. Representing tone by raised numbers, for example, has generally had low reader acceptability in Mexico. Diacritics have fared a bit better, and the fewer the better. Languages in which tone is not marked at all have generally enjoyed higher acceptance of VL literacy.

2. Community involvement

Trying to involve community leaders in decisions regarding the orthography and other aspects of the literacy program will increase VL literacy acceptance. This is because community involvement imparts a greater sense of ownership of the VL literacy program to the community and its leaders. Even though the VL may be difficult to read (compared with the NL), if the community feels that the

orthography is theirs (i.e. the way they like it, because they decided how it would look), they will be more apt to learn it and use it.

Though it may be difficult for a highly trained expatriate literacy promoter to do, allowing the community as much control over the VL literacy program as they are willing to accept will increase acceptance of VL literacy. It will also help to provide the social infrastructure that will make VL literacy a part of the culture, rather than an appendage that will die and drop off after the expatriate goes home.

C. Where do we go from here?

Having gone this far in developing a model for predicting VL literacy acceptance, what now? Testing the model for its fit with more VL literacy program cases is necessary. Certainly this study should be improved on and extended to more cases, comparing the findings for one country or region with another. Other avenues of research would also help increase our understanding of the dynamics of VL literacy acceptance, and therefore, improve a predictive model.

Motivation for literacy is an area in which careful research is needed. Motivation is tied into the perceived usefulness of literacy for specific functions, which, in turn, is related to societal values. The absence of any hindering factor discussed in this study does not guarantee acceptance of VL literacy. Motivation is essential to VL literacy acceptance, but little research has been done in this vital area. (Spolsky and Irvine, 1982, and Walker, 1987 are two studies moving in this direction.)

Besides the need for cross-cultural studies dealing with motivation for literacy, there is a great need for more in-depth case studies (like Henne, 1985). If detailed case studies were made using a uniform format (e.g. considering the factors found to be significant in this study), there would be a wealth of data to compare with and build on to the findings of this study.

Another important avenue of research is the documentation of sociolinguistic factors at the time when VL literacy programs are initiated. As the program develops, one can see how reality fits with the prediction made from the early data. Such documentation would facilitate diachronic case studies which can enable us to see how

trends develop through time and help us to understand the dynamic interaction of the social forces that shape language attitudes and influence VL literacy acceptance.

Note: This paper is a brief summary of my doctoral dissertation in applied linguistics (UCLA, 1987). Those readers who would like a fuller discussion (e.g. statistical and methodological details) will find it in the dissertation itself (available through University Microfilms, Ann Arbor, Michigan) or in a condensed version (available from the author). Additional data are needed in order to increase our understanding of vernacular literacy acceptance. You can help by completing the questionnaire in Appendix D, and sending it to Roland Walker, SIL Box 54, Jayapura, IRJA, Indonesia. Thank you for your help.

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VI. Appendices

A. Table 1 - Correlations between criterion variables of VL literacy acceptance and predictor variables

Predictor	Criterion			
	PL	RA	IU	CU
1. Distance from a town	.42**	.06	-.14	.21
2. Intermarriage	-.13	.58**	.12	-.28
3. Non-natives in community	-.17	.17	-.04	-.36**
4. NL proficiency	-.01	.36**	.40**	-.36**
5. Education	-.40**	.29*	.20	-.32*
6. Previously reading the NL	-.35*	.10	.23	-.60**
7. Leaving to find employment	-.29*	.14	.04	-.33*
8. Importance of NL proficiency	-.37**	-.06	.06	-.05
9. Need NL for occupation: speak	-.33*	-.19	-.14	-.32*
10. Attitude of gov't officials	.10	-.10	-.07	.30*
11. Language use: Church	.33*	-.15	-.01	.62**
12. Language use: Occupation	.28*	-.07	.04	-.01
13. Language use: School	.35**	-.06	.01	.28
14. Language use: Singing	.30*	-.05	-.26	.56**
15. Percentage living by Bible	.43**	.15	.07	.35*
16. VL orthography differences	-.19	-.31*	-.19	-.29*
17. Ease of reading the VL	.40**	.09	.10	.54**
18. Community involvement: orthog.	.30*	.41**	.46**	.11
19. Community involvement: other	.46**	.28*	.12	.35*

* Significant at the .05 level or greater

** Significant at the .01 level or greater

PL - Purchase Literature
RA - Reading Ability
IU - Informal Usage
CU - Church Usage

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B. Table 2 - Multiple regression analysis: Purchase of VL literature: entering sociolinguistic predictor variables only (N=54)

Step	Variable	R	R SQ	R SQ Adj.	R SQ Inc.	P
1 (15)	Percent living by Bible	.443	.196	.181	.196	.000
2 (5)	-Education	.596	.355	.330	.160	.001
3 (1)	Distance from a town	.627	.393	.356	.037	.076
4 (9)	-Need NL for occupation: speak	.650	.423	.376	.030	.109
5 (11)	Language use: Church	.663	.440	.382	.017	.222
6 (13)	Language use: School	.677	.458	.389	.018	.216
7 (8)	-Importance of NL proficiency	.693	.480	.401	.022	.165

Multiple regression analysis: Purchase of VL literature: (N=54)
entering sociolinguistic, program, and orthography variables

Step	Variable	R	R SQ	R SQ Adj.	R SQ Inc.	P
1 (19)	Community involvement: other	.470	.221	.210	.221	.000
2 (13)	Language use: School	.656	.430	.408	.210	.000
3 (8)	-Importance of NL proficiency	.723	.522	.494	.093	.001
4	-Population of the community	.751	.564	.528	.041	.028
5 (9)	-Need NL for occupation: speak	.766	.586	.543	.022	.103
6 (15)	Percent living by Bible	.776	.602	.551	.016	.164
7 (5)	-Education	.786	.617	.560	.015	.164
8 (6)	-Previously reading NL	.798	.637	.572	.019	.127
9 (11)	Language use: Church	.806	.650	.579	.014	.199

- Regression Coefficient was negative, indicating negative contribution to outcome.

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C. Table 3 - Multiple regression analysis: Use of VL Scripture in church: entering sociolinguistic predictor variables only (N=54)

Step	Variable	R	R SQ	R SQ Adj.	R SQ Inc.	P
1 (11)	Language use: Church	.624	.389	.377	.389	.000
2 (14)	Language use: Singing	.696	.484	.464	.095	.001
3 (3)	-Non-natives in community	.735	.541	.513	.057	.010
4 (9)	-Need NL for occupation: speak	.776	.602	.570	.062	.007
5 (10)	Attitude of gov't officials	.788	.620	.581	.018	.139
6 (15)	Percentage living by Bible	.796	.633	.586	.013	.213

Multiple regression analysis: Use of VL Scripture in church:
entering sociolinguistic, program, and orthography variables (N=54)

Step	Variable	R	R SQ	R SQ Adj.	R SQ Inc.	P
1 (11)	Language use: Church	.624	.389	.377	.389	.000
2 (17)	Ease of reading the VL	.716	.512	.493	.123	.000
3 (3)	-Non-natives in community	.764	.583	.558	.071	.002
4 (9)	-Need NL for occupation: speak	.800	.640	.611	.057	.004
5 (16)	-VL orthography differences	.825	.680	.647	.040	.015
6 (6)	-Previously reading NL	.840	.705	.667	.025	.053

· Regression Coefficient was negative, indicating negative contribution to outcome.

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D. SOCIOLINGUISTIC INFLUENCES ON VERNACULAR LITERACY ACCEPTANCE

If you have distributed at least two VL Scripture publications, your answers on the following questionnaire will help to contribute to our understanding of vernacular literacy acceptance. (We suggest that you make an enlarged photocopy for filling in, after which please send to Roland Walker, SIL Box 54, Jayapura, IRJA, Indonesia.)

Instructions (PLEASE READ CAREFULLY)

Please answer the questions for the ONE COMMUNITY which you know best, not the entire language group. Since we want to get a picture of what the community was like during one time period, answer the questions in light of the situation during the most recent year you have knowledge of.

When estimating percentages, it is helpful to convert those percentages to real numbers, to check your estimate. For example, if you estimate that 20% of the population can read, and there are 800 people in the community, ask yourself, "Does 160 readers in the village sound about right?"

Your Name:_____

VL = Vernacular language (the mother tongue; 'idiom')_____

NL = National language (e.g. Spanish, Portuguese)_____

(If some other language is the medium of instruction in school, consider it as the NL, as you answer the following questions:)

+ Name of Community:_____
+ Population of the community:_____
+ In what year did you begin to work in the community?_____
+ Most recent year you lived in the community for more than 1 month? 19_____
+ Year for which you are describing the community: 19_____
+ Location: (country, province, state, etc.)_____
+ VL Scripture publications:

Date of Pub?	English Title:	Diglot w/NL (Yes/No)

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PLEASE ANSWER questions C1-5 for both the VL and the NL: (If you cannot answer at least three of these five questions for the VL, answers to other questions will not have value for this study. Answers re the NL are helpful, but not essential.)

C1a. How many people have purchased (or wanted to receive as a gift) Scriptures (either the New Testament or Scripture portions)? VL = _____
NL = _____

C1b. How many people have purchased (or received) other types of literature (i.e. not Scriptures) VL = _____ NL = _____

C2. What is the percentage of the population who can read narratives with understanding? VL = _____% age 10-25; _____% age 26-40
NL = _____% age 10-25; _____% age 26-40

C3. What percentage of the population spend time reading (any kind of literature) weekly in informal settings (i.e. outside church and school)?
VL = _____% age 10-25; _____% age 26-40 •• NL = _____% age 10-25; _____% age 26-40

C4. For each church in the community, are Scriptures read aloud in church meetings? 3=every meeting; 2=most meetings; 1=some meetings; 0=not at all. (Circle the best answer for each church.)

(list each church)	VL		NL	Average Attendance
_____	3 2 1 0	•	3 2 1 0	_____
_____	3 2 1 0	•	3 2 1 0	_____
_____	3 2 1 0	•	3 2 1 0	_____
_____	3 2 1 0	•	3 2 1 0	_____
_____	3 2 1 0	•	3 2 1 0	_____
_____	3 2 1 0	•	3 2 1 0	_____

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If you were able to answer the above questions (at least most of them) try the following:

1. How many hours travel (by the commonest mode) is it to a town where the NL is widely used? _____ hours

2. Circle which language is most dominant in each domain for spoken use.

Language		Domain
VL	NL	home
VL	NL	community
VL	NL	church/religion
VL	NL	occupation
VL	NL	school classroom
VL	NL	government
VL	NL	singing

3. Religious makeup: e.g. Catholic, Protestant, Islamic, animist (list each church/type and the percentage of the population in each):

___% _____	___% _____
___% _____	___% _____
___% _____	___% _____

4. Estimate the percentage of the community (of any religious affiliation) who aim at living their lives according to the Bible. _____%

5. Use the Rating Scale below to estimate PROFICIENCY IN THE NL for males age 26-40. Give the percentage at each level of proficiency. (See the Example - a situation in which 40% of the males age 26-40 are at level 0 and 60% are at level 1.)

RATING SCALE

Level 0. No ability.

Level 1. Can carry out minimal activities of daily living in the language.

Level 2. Can respond to opportunities and interact in routine social situations and limited work requirements.

Level 3. Can satisfy normal social and work requirements with sufficient structural accuracy and vocabulary to meet these limited needs.

Level 4. Can communicate effectively with vocabulary that is always extensive and precise enough to convey exact meaning.

Level 5. 'Native speaker' fluency.

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EXAMPLE

SEX/AGE	PROFICIENCY LEVELS (%) 0	1	2	3	4	5	
males 26 - 40	| 40	| 60	|	|	|	|	| = 100%

Rate PROFICIENCY IN THE NL in 'your' community below:

	Proficiency Levels (%) 0	1	2	3	4	5	
males 26 - 40	|	|	|	|	|	|	| = 100%

6. Estimate the percentage of homes in the community where people live who are not native to the community and do not speak the VL. _____%

7. List the number of symbols in the VL orthography that are not found in the NL orthography or which have different phonemic values.

Number	Item	Symbols
_____	consonants	_____
_____	glottal stop	_____
_____	vowels	_____
_____	nasalized vowels	_____
_____	vowel length	_____
_____	accent (phonemic or ballistic)	_____
_____	tone	_____
_____	etc.	_____

8. How difficult do people in the community view reading the VL? (Check one)
   ( ) 0 It is much more difficult to read than the NL
   ( ) 1 It is fairly difficult compared to the NL
   ( ) 2 It is about the same as reading the NL
   ( ) 3 It is fairly easy compared to the NL
   ( ) 4 It is very easy compared to the NL

9. What percentage of the adult males need the NL to carry out their occupation? (See #5 for proficiency levels)
   _____% spoken proficiency at Level 2 or above;
   _____% at Level 3 or above

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10. Economically, for the people in the community . . . (Check one)
    ( ) 0 most can earn a living as they traditionally have
    ( ) 1 a few are beginning to leave the community to find jobs
    ( ) 2 more and more are leaving to find jobs on the outside
    ( ) 3 many people leave the community to work for wages.

11. How important do the people feel proficiency in the NL is to economic advancement? (Circle a number)
    Not important - 0 1 2 3 4 - Very important.

12. What percentage of VL readers could read the NL first. _____%

13. What is the average number of years of formal education completed by adult males? _____

14. Circle the number on the continuum that best answers the question: What is the prevailing attitude of local government officials, who are not VL speakers (e.g. school teachers or whoever is most influential in the community) to the development and use of the VL for literacy?
    Negative - 0 1 2 3 4 + Positive

15. To what extent were community leaders involved in orthography decisions?
    ( ) 0 Actively opposed to the SIL produced orthography
    ( ) 1 Not involved -- neutral
    ( ) 2 Involved and supportive of the orthography
    ( ) 3 Enthusiastic promoter/s of the orthography.

16. To what extent were community leaders involved in other aspects of the VL literacy program?
    ( ) 0 Opposed to it
    ( ) 1 Not involved at all
    ( ) 2 Involved, to some degree
    ( ) 3 Actively involved
    ( ) 4 Enthusiastic promoter/s.

17. What other factors do you think most account for the degree to which the community has or has not accepted VL literacy?

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A RATIONALE FOR LANGUAGE CHOICE IN ADULT EDUCATION

Mary Muse Morgan

Abstract: In the literature regarding language choice for adult education, factors such as cost efficiency, language adequacy, and educational purposes have been discussed. The author submits that four additional factors must be taken into consideration when the question arises of whether vernacular (V) or standard (S) be the language of adult education. These factors are: a language-use profile of a society, the complexity of the phonology of the V language, the resources available on the village level, and the functions of literacy.

I. Introduction
II. A Rationale for Language Choice for Adult Literacy
III. Literacy Functions: A Consideration of Kwaio and Tzeltal
IV. Conclusion
V. References

I. Introduction

For many years I have been concerned that the discussion about which language should be used for education has been polarized by vernacular-first advocates versus direct-method standard language devotees. There have been studies and tests and analyses, all of which prove that the side doing the tests is in the right.

It is gratifying to see that in recent years a broader framework for looking at choice of language for education in bilingual and multilingual societies has emerged. Not only language functions, but literacy functions are looked at. Attitudes toward the language(s) in question are now considered along with purposes of education. Cultural factors are correlated with national education goals.

Nadine Dutcher in a Staff Working Paper for the World Bank (1982) made the point that the value the wider community puts on the mother tongue of the student is an important consideration in the choice of language for education. If the student's language has a lower social and economic status than does a second language, the student will be more successful learning to read and write in his (or

her) first language--a language which does not intimidate him. On the other hand, if the first language is viewed as having a social and economic status as high or higher than the second language, and the student has an adequate understanding of the latter, he can learn just as well in the second language. Dutcher (1982.23,15) came to these conclusions after analyzing the results of such works as Modiano's Tzeltal study in Mexico (1973) and the St. Lambert's Immersion study in Canada (1972). She shows very clearly that the reason for different conclusions regarding success and failure for vernacular and second language choices for education have to do with a very wide range of factors.

Two other recent studies stress the importance of looking at the functions of various languages within a multilingual society and, what is of even more importance, of looking at the functions of literacy in that same society.

(1) Robert Litteral (1982.3) presents a vernacular language planning model that he developed after years of experience in Papua New Guinea. He states that his model "will extend the awareness of those working in vernacular programs beyond the problems associated with code inadequacies and program development to the social, political, and cultural environment of the vernacular."

(2) Bernard Spolsky (1982.143-143) suggests "studying literacy as a social phenomenon, looking at the role played by the written language in the functioning of a community."

For illustrative purposes a set of questions posited by Spolsky and Irvine (1982) will be addressed in Section III of this paper to two different situations, one in the Solomon Islands (Kwaio) and the other in Mexico (Tzeltal).

II. A Rationale for Language Choice for Adult Literacy

A rationale for language choice for literacy gives us a set of fundamental reasons for choosing one language rather than another. Of the many factors in this complex issue, four are suggested here as central:

1) the language-use profile of a society;

2) the complexity of the phonology of a vernacular language as it affects the development of an orthography;
3) the local resources available to develop a literacy program; and
4) the literacy functions within the society.

By carefully considering these factors, an appropriate and adequate choice of language for initial literacy can be made. Literacy means here the ability to read and write with comprehension.

1. Language-use profiles

In many multilingual countries such as the Solomon Islands (SI) and Mexico (M), the presence of many languages does not mean that on the village level, there is a truly bilingual situation. There may be a diglossic relationship between a standard language (S), a vernacular language (V), or a pidgin (Pijin) (P) in some domains, but the actual contact V speakers have with S or P speakers may be extremely limited. The following figures give language-use profiles and explanations for the two societies being examined here:

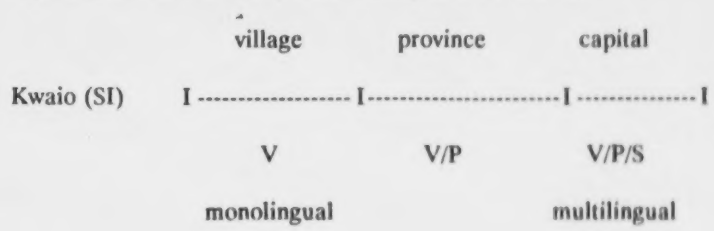

Figure 1.

On the village level there are many monolingual Kwaio speakers. Even though there may be some who speak Pijin, the lingua franca, they do not speak it with the village people, their "wantoks", but only with people from other language areas. Pijin is the medium of instruction in the village school although textbooks are in English, the S language. The latter is read or spoken by only a few in the village and then only in the church services of some denominations and with an expatriate visitor to the village.

On the provincial level, that is, outside the village or V language area, Pijin is the language used with those who are not "wantoks".

Although some of the village people may know S they do not use it unless there are expatriates present or to establish educational credibility. In the capital, Honiara, S is used in government and church domains and for all written purposes.

Generally speaking V is spoken with "wantoks", P is spoken with other Solomon Islanders, and S with expatriates. Almost all Solomon Islanders speak a vernacular language; the number of Islanders who are mother tongue speakers of S or P is less than 1% (1980 census information).

Figure 2 gives a picture of the language-use profile for Tzeltal speakers of Chiapas, Mexico. (The arrow indicates that language learning goes in the direction of V to S, not the reverse.)

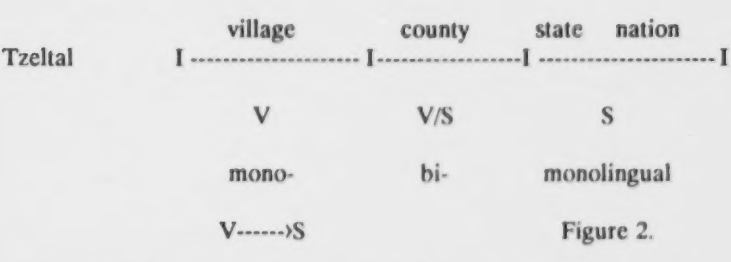

Figure 2.

In Tzeltal villages only Tzeltal is spoken to other villagers. Teachers use Spanish in school. Spanish is used with outsiders including salesmen, bus drivers, ranchers, and tourists.

The recognized bilinguals are the pastors, catechists, teachers, and town officials; the number of bilinguals is increasing through expanded schools and roads.

The purpose of looking at these two language-use profiles is to recognize criteria for determining if a given society is monolingual in a majority of domains and if actual contact with speakers of a second language is extremely limited. If the above pertain, initial literacy is more appropriate in the language in use, the V. If, however, two or more languages are used by a large number of people in various domains, other factors need to be considered as to language choice

for literacy. Among these factors is the attitude of the wider community as suggested by Butcher above.

2. The complexity of the phonology

The complexity of the phonology of the vernacular language has two dimensions. One has to do with the complexity of the V phonology in relation to that of the S. The latter language by definition has available literature. Access to that literature may be vital to maintaining the habit of reading. If the V is related to the S, or if the phonologies and orthographies are similar, there is easy transference of literacy skills from the V to the S, or vice versa. The other dimension has to do with the phonology of the vernacular language itself. If the V has more than five vowels, complex tones, nasalization, palatization and other features which do not lend themselves to linearity, more time and effort as well as linguistic analysis are required to develop an adequate orthography for that language.

The Austronesian languages in the Solomon Islands lend themselves quite well to the Roman alphabet. Many people have learned to read Kwaio, for example, by memorizing a syllable chart. The inventory of five vowels and sixteen consonants makes Kwaio relatively easy for beginning readers.

On the other hand, Totontepec Mixe of Oaxaca, Mexico, has seven syllable nuclei, nine vowels, extensive palatalization, and many complicated morphophonemic permutations which are difficult to represent with the Roman alphabet. The town of Totontepec boasts doctors, musicians and professors, some of whom have tried to write their own mother tongue language without the benefit of linguistic training. They give up after a few attempts.

If the speakers of a V language (with some knowledge of reading and writing in the S language) can learn to write the V language with comparative ease, the development of initial literacy material as well as more advanced materials such as stories, histories, and legends can be done by the people themselves without a great deal of outside help.

If, on the other hand, the V has a complicated phonology, with symbols and structures quite different from those of the S, extensive

linguistic training and analysis may be required to develop an adequate orthography and initial literacy materials.

3. Resources available to develop literacy

When educators think about literacy, they must give careful consideration to the ways and means of getting a program started. Almost always, the initiative for literacy programs is from outside the society. The program is expected to serve the interests of outside agencies, e.g. to enable V speakers to read Scriptures in their own language, to teach a political ideology, or to teach the S language and culture to V speakers. However, the V speakers themselves possess great potential for helping introduce literacy.

The personal resources of the V speakers are often overlooked in the development of literacy programs. In the Solomon Islands there are many school leavers who have left school before finishing and who have gone back to their villages after having had some secondary schooling. Their book learning has been put to little use, yet they represent potential writers and teachers who can help bridge the gap between the V and S languages and cultures.

The older people of a V society are another source of information and help in introducing literacy. They are the ones who know and pass on traditions and cultural values. They are the ones who decide if the written word in the V will actually function in their language and society.

The people themselves can participate as planners, authors, teachers, and supervisors of any type of literacy program. In Ghana various kinds of informal and formal literacy programs in the V have taken place in village areas with the local people carrying out the programs. (Hampton, 1986.31-37).

The literacy materials can be produced on the village level with a minimum of equipment, i.e. typewriters, mimeograph duplicators and inexpensive paper. The involvement of the local people in the production of the materials to be used in the literacy program becomes a means of training and encouragement for those people. They themselves will provide the key to how the promotion and teaching of literacy will be accepted and can be accomplished (Young, 1981).

Available resources may also include the books, such as Scriptures, hymnbooks, and liturgy which already are in print and distributed. Reading these books can be the basic motivation for many participants in any kind of literacy program.

The presence and availability of local resources make the choice of initial literacy in the V a viable one. The current bilingual program of Guatemala is a good example of the involvement of local people and resources. The program serves four major indigenous language groups and is under the direction of Lic. Hector Eliu Cifuentes of the Programa Nacional de Educacion Bilingue.

4. Literacy functions within the society

In a given society there are certain functions of the written medium of communication. Spolsky (1982) gives a range of literacies which might be found. There is the literacy required for personal diary and letter writing. Others are the sacred text literacy, civic literacy (the requirements a state makes of its citizens), bureaucratic literacy (which a state requires of those who keep track of its activities) and academic essayist literacy.

In the societies studied for this paper, a number of literacy functions are active in the V languages, e.g. letter writing, the use of hymn books, liturgy and Scripture reading. Sections 5 and 6 of III give more details.

In monolingual V-speaking societies where there are as yet no literacy functions in the V, ethnographic studies must be made to determine in what circumstances the written word might become functional.

III. Literacy Functions: A Consideration of Kwaio and Tzeltal

In this section of the paper a set of seven questions formulated by Spolsky and Irvine (1982.78-79) regarding literacy in a given society will be asked, with answers coming from Kwaio (Morgan, 1983, and Young, 1982) and Tzeltal data. All information is based on the personal observation and experience of the author.

The Kwaio people live in the central part of the island of Malaita in the central Solomon Islands (SI). Kwaio is an Austronesian

language. The SI are located to the east of Papua New Guinea. The Tzeltal people live in Southeastern Mexico, in the state of Chiapas. Tzeltal is a Mayan language.

1. Under what conditions do certain groups of people accept literacy in the V?

Kwaio:

The Kwaio have accepted literacy in the V through the development and promotion of V literacy by Catholic missionaries. A secondary factor is the simplicity of the phonological system of the language which lends itself to ease of writing and teaching to write.

The Catholic church has had the Mass translated and read in Kwaio since Vatican II. Translation of Scriptures has been carried on by priests for a number of years. The expatriate and Solomon Islands religious personnel on the Catholic mission stations in the Kwaio area have learned the Kwaio language. The examples of the outsiders in using the written form of Kwaio is a strong encouragement for the speakers of that language to do the same.

The mission stations until 1974 also had boarding schools for primary and secondary levels and employed English as the language of instruction. Some of these schools gave initial instruction in the local language if all the children spoke that language. Even today, initial instruction in reading is given in the Kwaio language in the village school which is located on the mission station in Buma.

Literacy in the V has recently been introduced by Peace Corps personnel and the local officials in the pagan areas along with programs to promote traditional customs, wood carving and weaving.

Tzeltal:

The Tzeltal people have had Scriptures in the Oxchuc and Bachajon varieties for thirty and twenty years respectively. There are 40,000 members of the Presbyterian church, as well as members of the even larger Catholic church (and other denominations) that constantly use the Scriptures in Tzeltal. There is no one in the Tzeltal area that has not had some contact with written Tzeltal in Scriptures and hymnbooks. There is also initial education in Tzeltal

for children in the schools of the National Indian Institute (INI). There is considerable use of V literacy in the church, limited use in school, and little V literacy elsewhere.

2. What conditions prompt groups to move towards literacy in the S?

Kwaio:

The condition favoring the S is the need for a common language for the Solomon Islands and a language for communication with the outside world. English has been the language of choice.

Tzeltal:

In the case of the Tzeltal, there are two circumstances which have prompted the move towards literacy in the S, which is Spanish. The first is the introduction of roads which has made communication with the Spanish speaking world a reality. The second is the extension of INI schools making it possible to learn to read and write Spanish.

3. What are the tensions that arise in each of the decisions?

Kwaio:

In the SI there is a choice to be made between the well-understood V and the much-desired English. The expectation that learning fluent English is possible for the village person seems unrealistic. There is a lack of contact with English speaking people and a lack of relevance of English to the everyday life of the large majority of the people. Pijin which has more relevance and usage on the village level has heretofore not been considered worthy of being written and used as an S language. But since Pijin is similar to the Melanesian languages in its syntax and phonology, with derivatives of English in its lexicon, it is fairly easy for a Solomon Islander to learn, especially if he has had some schooling in English.

English is spoken fluently by a very small number of Solomon Islanders most of whom are concentrated in the capital city of Honiara. Solomon Islanders would like their children to do well in English so that they will be eligible to go on to secondary school,

university and eventually achieve a government job. It is very difficult for children who have limited contact with English to pass the tests required for continuing with formal education. For the most part, formal education has very little to do with the ordinary life of the village people.

Tzeltal:

The main difference between the Tzeltal and Kwaio situations is that the S for the Tzeltals is the mother tongue language of the majority of the people in the Mexican nation, while the S for the Solomon Islanders is not the mother tongue of any large group of people. Tzeltal is spoken by over 100,000 people who represent a low status minority. Access to the majority culture is through Spanish. One of the outcomes of the training of Tzeltals to teach Spanish in the village schools has been the development of a group of people who are neither main stream Mexicans, nor are they monolingual and monocultural Tzeltals. They represent a new order: bilinguals. The tension here is not a matter of being literate but of a change in social status for some of those who are literate in Spanish, especially the school teachers.

4. Was literacy in either the V or S generated from within the group, or was it introduced from the outside? For what purposes, and with what consequences?

Kwaio:

Literacy in the V, S and P has been generated from outside, primarily through mission agencies. English (S) has also been promoted by the English government. The primary purpose of literacy in the SI has been to evangelize and make meaningful the Christian religion. V languages have been chosen as church languages and used extensively in related language areas; e.g. Mota, a Banks Island language was used in the Anglican church, and Roviana is the language used by the United Church in the Western Province. English had also been used to evangelize island workers on the sugar plantations of Queensland, Australia, where the South Seas Evangelical church began its work and later spread to the SI and many other South Pacific islands.

The consequences of the practices of literacy by mission agencies is that in all of the language groups, literacy is a known commodity and in all but the pagan societies plays an important function in religious practices. There are few villages that do not have Bibles and hymnbooks. There are also liturgical books in the Catholic and Anglican areas. There are, however, few other books in the villages except schoolbooks in English. The large majority of people have seen books and they know that books communicate. They have also seen books in V languages even if not in their own language.

The Solomon Islands is a newly independent country with the enormous problem of creating unity out of a diversity of races and languages. The British government was the controlling body for the SI during the twentieth century until independence in 1979. Christian mission organizations carried on all of the formal education during the years before and after the Second World War until 1974. The official language of government, education and commerce was and is English. It has been only in the last ten years that serious attempts have been made to develop a written Pijin based on the spoken lingua franca of the Islands.

Tzeltal:

Literacy in the V and S has been initiated from the outside. However, literacy in the V is strengthened and maintained through the influence of the churches and the emphasis on written Scriptures being read by everyone.

The overwhelming fact is that thousands of Tzeltals are literate in their own language with only the Scriptures as the major piece of literature. Many do write personal letters in Tzeltal, but there are few if any Tzeltal authors developing further literature.

With regard to the consequences of literacy in Spanish, many young people have left their village areas because of the opportunity of integrating into the national culture through being literate and able to converse in Spanish.

5. What are the functions of literacy in the community? Who writes, who reads, about what topics, in what settings? What language is used? If more than one, is there a functional differentiation of language?

Kwaio:

In the Kwaio area literacy is used in the church as mentioned above. Literacy is also used and taught in the village schools. Though there is some initial instruction in the V, all of the texts are in English. The language of instruction, however, is Pijin in most cases because the village teachers do not know English very well. One of the reasons they are village teachers is because they did not pass the English Proficiency Examination that would allow them to advance in the educational system. One of the few things left for them to do with the educational level they have obtained is to become a village teacher.

Another function of literacy is letter writing. Since Kwaio boys and men are migrant workers throughout the SI, they are often away from home for long periods of time. The way they maintain contact with home is through letters and taking the annual Christmas break at home. Anyone who has had several years of schooling can read and write letters. There are usually several people in each family that can do this. Although a store keeper would be more likely to go to Honiara and buy his own supplies than to order them by letter, he might write to a "wantok" to bring supplies to him.

Tzeltal:

In Tzeltal villages, many of the men under fifty can read Tzeltal Scriptures and most young people under twenty can read Tzeltal since they have had schooling in Spanish and can easily transfer reading skills to Tzeltal. People read Tzeltal in church, Spanish in school. Some personal letter writing is carried on in Tzeltal.

In the county seats (minicipios) S is the language used in government business, i.e. birth, marriage and land registrations, court proceedings, etc. Mother tongue S speakers do not know or use the V except for some salesmen who use V words for merchandise and money. Mother tongue V speakers use limited Spanish in dealing

with S-speaking doctors, lawyers, store owners and government officials.

6. To what extent are the functions associated with literacy indigenous to the culture and to what extent do they derive from technological and social change associated with contact with modernized society?

Kwaio:

Although Christianity came from outside over a hundred years ago, it is now an integral part of village life and customs. Literacy plays an important role in Christianity as it is practiced in the SI in the liturgical churches as well as in the other denominations. The training of the priests, pastors and catechists is carried out in English. Modern technology and the need to communicate with the outside world make English a necessity for some Solomon Islanders but not for the Kwaio people as a whole.

Tzeltal:

Literacy in Tzeltal is due to the practice of the Christian church, both Catholic and Protestant, of using the Tzeltal Scriptures. Even though introduced from the outside, the use of V literacy is now indigenous. Informal teaching to read is also carried on when requested by a friend or family member. Literacy is in the V and has no direct connection with the industrialization of Mexico.

S literacy is associated with social and economic advancement. With more and more schools in the Tzeltal area there is a marked introduction of Spanish vocabulary into the language of the young people. Whether Spanish is displacing Tzeltal or maintains a diglossic relationship with Tzeltal requires further study.

At present V literacy is operative in church life and S literacy is operative in the schools and in contact with the Spanish speaking society.

7. To what extent has change occurred over time?

Kwalo:

The alternative of using written Pijin as a language of national communication is gaining popularity. Pijin has been codified with an orthography similar to that of Melanesian languages. Primers and reading books have been developed. Scriptures are being translated into Pijin. Health, development and agricultural field workers are recognizing the need to put their materials into Pijin for wider usefulness. Acceptance of Pijin literacy is slow in coming because government and church officials prefer English or V languages for literacy. The limited use of V and the inaccessibility of English to the majority of the people, however, make Pijin an attractive third choice.

Because of the disbanding of primary boarding schools taught by English speaking expatriates and the development of village schools taught by Solomon Islanders, the level of English proficiency has gone down. English is losing ground, Pijin is gaining speakers and the V is maintaining a status quo.

Tzeltal:

V literacy has strengthened the sense of ethnic identity of the Tzeltal people. With the coming of schools and roads, the people now have contact with the outside world. The Tzeltal governing elders of one group of the National Presbyterian Church of Mexico have recently requested that mother tongue speakers of Spanish develop a program to teach them, the elders, Spanish as a second language. This choosing to learn Spanish is in contrast to the attitude that Spanish must be imposed from the outside. There is now an openness to the S-speaking world.

IV. Conclusion

The analysis of a multilingual society to determine the language of education should take into consideration such factors as cost efficiency, language adequacy and educational purposes as well as the factors included in this paper: a language-use profile of the society, the complexity of the phonology of the V, the resources on the village level, and the functions of literacy. From this kind of analysis

possible alternatives emerge which are tied into reality. Informed decisions about language choice for education can be made with the help of the people being affected.

The kind of analysis described here does not allow for simplistic language choices nor for a single solution that covers many different societies and language groups.

A comprehensive rationale for language choice for education can provide the in-depth qualitative study that is needed for language planning. Questions of elaboration and implementation will be answered with input from the local level rather than solely from the national level.

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Notes on Literacy

No. 55

1988

VOLUME 2: PAPERS PRESENTED AT THE MINICONFERENCE ON VERNACULAR LITERACY AT STANFORD JULY 24-25, 1987

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SUMMER INSTITUTE OF LINGUISTICS
DALLAS, TEXAS

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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdon Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

Academic Book Center

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
U.S.A.

EDITOR: Olive A. Shell

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MAGIC MARKERS

Kathy Bosscher

I. Background
II. Introduction
III. The Process
IV. Looking Back
V. A Later Perspective
VI. The Magic in the Markers

I. Background

Assumption: Ownership of a program implies that ideas accepted and promoted by field workers become ideas that are accepted and promoted by people inside the language community.

Hypothesis: There are specific events that mark transition of ownership from the field workers to people from within the language community. At transition points, community insiders take the initiative and make decisions that affect the subsequent course of action. Activities leading up to these events focus on sharing ideas. Activities following these events focus on implementing ideas that have been accepted.

Implications: It is important and necessary, not only to take note of these events, but to plan for them.

> 1) Awareness of these events helps the field workers determine what course of action should be taken--a course that focuses on idea sharing or one that focuses on idea implementation. Stated in another way: if there are no events that mark the acceptance of the ideas by people from within the community, the field workers are obliged to continue at the level of idea sharing.

2) Where there are consistent patterns of community rejection after ideas have been carefully presented and concretely demonstrated, the field workers will be able to withdraw from the program in good conscience.

3) Awareness of these events gives field workers a way of introducing change without violating the integrity or freedom of the group to make decisions.

Comment: This paper was written to document my observations of the kind of events that mark the transfer of ownership and how these events are planned and managed for the advantage of the program. It does not directly address the question: Can we predict when vernacular literacy will be accepted by the language community? However, it gives field workers a framework by which they can evaluate a community's response to introduced ideas. Documentation of these responses across time can, in turn, give the field workers evidence for the continuation or the withdrawal of a program in a particular language community.

II. Introduction

I, along with many others, believe that, despite the time and effort required, there are only benefits to be gained from the involvement of local people in the language program. In discussing local involvement, a variety of terms have been used--local participation, program ownership, local infrastructure, partnership, and so on. No matter what terms we have used, we have been making explicit the fact that, in order to accomplish our work, people from within the language group must make decisions about the program--whether these be spiritual aspects, the translation, education, or community development; and that people from within the community must be able to do for themselves what is necessary to carry out those decisions, for example, reviewing the translation, teaching literacy, or managing a cooperative. The implication for the field worker is that he takes the role of "enabler", equipping people to make decisions and equipping them with the skills and resources needed to implement those decisions. Persuasion and education are primary tools for field work.

To restate the case in a different way: At the end, at least "somebody" from within the language group has to believe in "the

whatever" and have the skills and resources to act on that belief. Beyond that, "somebody" has to believe in "the whatever" enough to persuade others to believe and act upon it, too. We are, then, idea sharers, options builders, teachers and trainers. We cannot, over the long haul, be decision makers or "implementers". Those roles belong to people from within the language community.

III. The Process

How does the process work? In the past several years, I've had the opportunity to be an interested observer of many field programs throughout Asia. I have come to several conclusions. First, we can identify certain steps that need to be taken:

- Earning the "right to speak" by accepting some participant role within the community. By this I mean that the field worker gains credibility by accepting a community-assigned role, for example, nurse, teacher, banker, headman, etc., which enables him/her to gain a hearing on issues that lie outside of the assigned role.

- Raising issues and suggesting possible solutions to perceived problems. New ideas that are inherent in a translation or literacy program are first introduced in broad terms, often using questions to create a climate of inquiry, for example: How many people understand when the priest gives the sermon in Ilocano? Why do so many children stop school at second grade? Why can't people read Navajo very easily? Questions may also direct people's thinking toward possible answers: What would people say if the weekly reading was in Kalinga instead of Ilocano? Who could teach the adult illiterates to read? This step is often called consciousness raising.

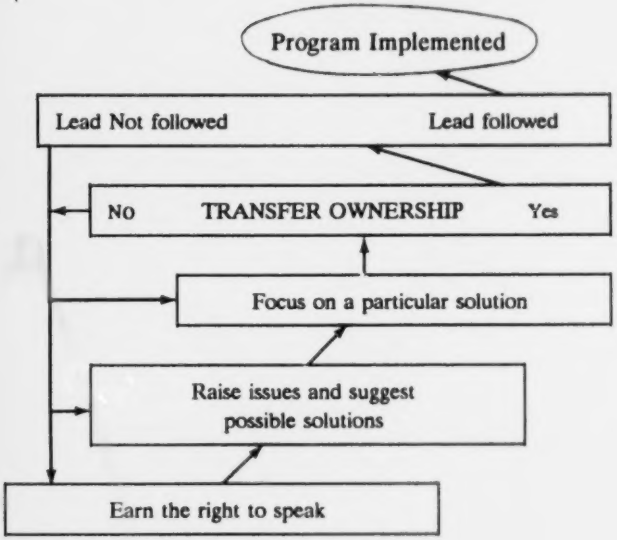
- Helping people focus on a particular solution to a particular problem. It is the business of the field worker to carefully assess the social, cultural and linguistic context and propose solutions that could work in those particular situations. (If the group could and were doing this on their own, the field worker would not be needed except as called upon by the group to provide certain resources or training. There are, of course, situations like that, but this is not true for many field programs in Asia.) Ideally, the solution is still elicited from the community, but the fact remains that the field worker often seeds very concrete ideas.

- Transferring ownership. Ideas accepted and promoted by the field workers become ideas that are accepted and promoted by the community. It is at this point that initiative must be taken by the local people; without that initiative, proposed ideas cannot be taken further. It is the point of decision making. Obviously, to be successful, the decisions must be made by recognized leaders rather than people who are marginal to the authority structure.

- Implementing the program. Now the field worker proceeds with the usual tasks: preparing materials, training people for various tasks and setting up a system for implementation--tasks with which we are all familiar.

As is true with any process, snags can occur at any step. The most obvious problem is where nobody "buys into" an idea which is necessary to the success of the program. This can happen for several reasons: a) the idea may be ill-defined or inappropriate to the situation; b) the idea may be too large or complex and people may not understand or may feel threatened by its implications; c) the idea sharer, i.e. the field worker, may not have the necessary credibility. Another recurring problem is that sometimes the "wrong people", i.e. people who do not have authority or influence, "buy into" the idea. In this case the field worker may follow the lead taken and realize later that no one else is following. Solutions, of course, will be specific to the situation, but I think we can safely say that each answer will incorporate the concept of recycling in the process.

From another perspective, what I am describing is a STYLE or an APPROACH to program implementation rather than a procedure. This style or approach is the antithesis of a "cookbook" procedure. It is, rather, dynamic, responsive to the situation, and creative. Obviously, the utilization of the style or approach ultimately depends upon the ATTITUDE of the field worker toward the people he serves. Litteral labels this style of program implementation as one that is <u>personnel</u> oriented in contrast to one that is <u>program</u> oriented.



This is the way I see the process and the recycling needed as problems arise.

A program naturally doesn't happen overnight. Program ownership is the cumulative effect of the enactment of hundreds of "little" decisions along the way. If people from within the language community are ultimately to be willing and able to make the "big" decisions, such as how the New Testament will be distributed, or how the literacy teachers will be paid, or how supplies will be purchased to maintain the production of vernacular books, they need the opportunity to make the "easy" decisions that are already within the scope of their experience and skill. They need, as well, the opportunity to stretch their decision-making experience and skill in a supportive setting. It is likely that the field worker will be the one to provide the tutoring and encouragement in those learning situations.

IV. Looking Back

Looking back, I see that there were two events that moved projects within our Kalinga literacy program from our ideas being pushed uphill to the people's ideas being chased downhill in the frenzy of program implementation. Being naive but conscientious literacy workers, Carol Porter and I had a couple of persistent ideas about what we wanted to see accomplished in the course of our

literacy project. Foremost among them was the idea of literacy classes for adults, taught and financed by people from within the community.

In the first phase of the program, we wanted to have a few pilot classes in our immediate village in order to model for and motivate the surrounding villages for a later, more expanded program. We had, it seemed, talked ourselves silly, exposing everyone with whom we came in contact, both casually and intentionally, with the possibility of holding classes during the upcoming slack period between the planting and harvesting of the rice. Time was growing short. We were visiting Wail one afternoon--I can't remember whether it was a casual or intentional visit. In any case, we had grown accustomed to using Wail's counsel, even though we weren't sure how much influence he had in the village: he was the head teacher of a small village high school but he was relatively young and did not own very much property. During our visit, along with the predictable coffee drinking, we discussed a predictable subject of how literacy classes could be started in our village. Then, quite unexpectedly, Wail said: "We need to have a meeting with the village elders."

It is only looking back that I recognize that moment as a turning point. In effect, as of that statement, things had been taken out of our hands. Wail called the elders together for a feast where we discussed the idea of literacy classes. Three councilmen asked for classes in their hamlets and committed themselves to selecting students and teachers. Thereafter, we simply followed, doing what needed to be done.

A similar thing happened during the second phase of the project. We were ready to begin an expanded program, starting classes in three villages in addition to having classes again in our own village. Our pilot classes had made certain things clear: village teachers expected remuneration for their teaching and village leaders expected the "government"--whatever that meant--to provide these resources. On that basis, we had initiated contacts with the Provincial Superintendent of Education. With him, we had made a number of decisions and begun taking steps toward implementing the program. We had, however, become stuck on a critical issue--money for the lay teachers. The Superintendent had provided funds for a Nonformal Education Teacher to supervise the program, but he was

noncommittal on the issue of honoraria for lay teachers. Consequently, we were left with an old familiar task--that of raising the subject whenever and with whomever possible: What should be done? How should it be done? We went ahead with training of teachers and the organization of classes. Soon classes were flourishing, but the money problem had not been solved.

Sometime during these classes, the Assistant Superintendent, himself a Kalinga although from a different dialect area, came to our village on school business. One evening, a party was given in his honor. Carol and I attended. The program followed the local custom in which the master of ceremonies called for songs, speeches, or dances from the guests at the party. Eventually, the MC requested a contribution from Dail, who happened to be a councilman who had successfully organized literacy classes in his hamlet. After a respectable pause, Dail commenced an "adi", a stylized spontaneous composition using a prescribed musical form. When people sang in the poetic form using older and more formal language, I usually found it difficult to follow. You can imagine my amazement as I began to pick up the thread of thought that Dail was composing at that moment. The gist was: Now our illiterates are learning to read, but what will happen when Carol and Kathy leave? I was stunned.

The next morning, we were summoned by the Assistant Superintendent. Again, we found ourselves in the happy position where we were no longer pushing an idea--we were following up on an idea that had been picked up by someone from within the community.

These two events--Wail's declaration: We need to have a meeting with the village elders; and Dail's "adi" addressed to the Assistant Superintendent asking: What will happen when Carol and Kathy leave?--marked two points of transition in our literacy project, when people from within the community believed enough in the changes we were suggesting that <u>they</u> took action.

V. A Later Perspective

After I had seen these markers in our own field project, I began to conceptualize a program, or segments of a program, in two phases: that of idea sharing and idea implementation. There will, most likely, be specific events that mark the transition between the two phases.

These events also mark the transfer of ownership from the field worker to people within the community. Knowing about these markers helps me in two ways: 1) I know what to look for as I try to gauge a community's readiness to accept change--people, particularly leaders, from within the community saying in some way or other, "What we should do is..." Until that message is communicated, I think that the field worker is obliged to maintain the role of idea sharer and option builder. He must keep talking and listening and showing concretely what he is talking about. 2) I can, in cases where decisions are too complex or too threatening to the group, attempt to break down decisions into components that are conceptually manageable and nonthreatening.

Since then, I've had other occasions to see the process at work. Some groups are accustomed to making decisions and the event that marks transition is bold and forthright. John and Carolyn Miller of SIL Malaysia and I fell into such a situation. Millers had used my visit as an opportunity to invite some of their Kadazan friends over to discuss the role of vernacular literature in meeting community needs. We hoped the discussion would help John and Carolyn assess people's language attitudes and foster some awareness of the possibilities for vernacular literature. A handful of Kadazan people spent the evening talking with us. As the evening grew later, a recurring comment was made, "You should discuss this with so-and-so and so-and-so." Marker one: In this case there were people who wanted to buy into an idea but recognized that they were not the people who had the necessary influence to initiate change.

We made ourselves available for another evening of discussion. This time the group included those whom the first group had tagged as "people who should be there". The discussion was winding down but one fellow kept asking, "But what should we do?" Marker two: In this situation, someone from within the group had bought into an idea and was unwilling to let the idea go until the people who were recognized as decision makers had brought the group to consensus on a course of action. Within three months, they had mobilized their resources and had prepared and published twelve vernacular titles for children.

For groups who have had little experience in making decisions of the kind needed in a translation or literacy program, the expression of acceptance is more tentative and necessarily demands greater support

from the field workers. I watched Feikje Vander Haak and Brigitte Woykos, SIL members working with Christian and Missionary Alliance among the Kui in Thailand, deal with this kind of situation. One Sunday afternoon, they were discussing with the Kui Christians different Scripture-use activities which they could continue after the field workers left. There was general enthusiasm for almost every activity that was proposed until a serious fellow in the back asked, "But will we be able to do these things after our aunties leave?" His question demonstrated that he understood the implications of assent and felt unable to meet the demands of such assent. He needed assurance from Feikje and Brigitte that they would be able to practice and learn what was needed to implement the activities in the eighteen months before the field workers would actually leave.

Asking people to make decisions in small aspects of the program allows them, in addition to the dignity of participating in decisions that affect them, to gain confidence for making decisions about matters of more consequence as the program matures. One field worker complained to me, "I'm so tired of the endless discussion that the literature committee has on whether word 'XYZ' or the word 'XMN' is going to represent the sound /X/ in the picture dictionary, but I'm disciplining myself against interfering because eventually they will need to decide whether 'ABC' or 'EFG' is going to be used as the word for 'God' in the Scripture translation."

The less experience the group has with the kind of decisions that are suggested by the program, the more careful the field worker will need to be in breaking down the decisions into manageable sequences, from both a conceptual and practical point of view. I have learned a lot since the days of our field project: mostly I've learned that I must be willing to exercise the discipline and must be willing to take the time that is required so that decisions that should be made by the people can be made by them.

I walked through the paces of controlled decision making with Mike and Joan Payne who work with the Language Project of the Church of Pakistan among the Dhati Bhil. We intended, in the few days I was spending with them, to introduce the "first" Dhati "literature" in a virtually illiterate village. After silkscreening a leaflet on a current event of the village, a new village well, Mike went from household to household talking about the idea of writing Dhati and raising the question, "What do you think the 'book' should be

about?" He had, of course, options to suggest: a book on tools, plants, animals, foods, etc. No one had very strong feelings, but in general, they thought "animals" would be good. To create more village interaction, we prepared a sample animal booklet and a sample animal poster and again Mike went visiting, asking people what format the material should take. This time, they had stronger ideas--it would be a poster. Stencils were made and we had open house silk-screening.

When I thought over their choices of "animals" as the subject and "poster" as the format, I realized that we could have taken an educated guess and probably come up with the same items. Joan had been hanging pictures of animals on the outside walls of their house for several weeks, so naturally "animals" came to mind. The poster decision made perfect sense for people who paint patterns on the outside walls of their homes for the mere delight of decoration. However, if we had made the decisions, "correct" though they might have been, we would have undermined the process of participation for program ownership that we were attempting to model.

VI. The Magic in the Markers

The significance of the "magic markers" of the turning point when the literacy program becomes the accepted responsibility of the people themselves has been exemplified in the Kalinga, Kadazan and other situations. The "magic" in those markers is most obvious in the following situation, where the foundation had been laid for continuing delegations of responsibility to those being served:

Richard and Kielo Brewis of SIL Malaysia told me how the parish priest in their language area had "out of the blue" appointed Richard's language teacher to the Parish Council and had told him that he was responsible to translate the lectionary reading weekly. Of course, it wasn't "out of the blue" at all. It began with a dinner at the Brewis's home where the priest, the language teacher and Richard and Kielo talked about common interests, including Scripture translation. The Brewises continued to communicate informally but regularly with the priest. When the event that marked the transition between idea sharing and idea implementation came, Richard and Kielo weren't even there. The priest took action on seeded ideas. The Brewises heard about it afterwards.

A CONSIDERATION OF KELMAN'S CONCEPT OF "SENTIMENTAL" VS. "INSTRUMENTAL" USE OF LANGUAGE AS IT APPLIES TO THE RETENTION OF VERNACULAR LITERACY

Marilyn G. Henne

Abstract: Herbert Kelman's article, Language as an aid and barrier to involvement in the national system (1971), describes two basic uses of language. One is the "sentimental" or affective use which reflects the sentiments and cultural values of a language community. The second is the "instrumental" or functional which reflects the use of language to achieve tangible ends. The purpose of this paper is to explore the application of Kelman's concept of language use to the prognosis for long-term retention of vernacular literacy among the world's small ethnic groups. I focus on my experience with the Summer Institute of Linguistics in the development of indigenous literature in Guatemala, Central America. Finally, I propose that an emphasis on the development of "sentimental" literature is the only hope for any retention of vernacular literacy in countries where national and international languages prevail in most domains of use. This may also imply that only a certain core of vernacular speakers will become literate in the mother tongue, while the majority learn and retain reading skills only in the language of wider communication (Fishman 1969) or not at all.

I. Introduction
II. Kelman's Concepts of "Sentimental" vs "Instrumental"
III. Vernacular LIteracy in Guatemala, Central America
IV. Conclusion

I. Introduction

It may be asked if the retention of vernacular literacy is a reasonable goal among speakers of third world minority languages. A body of literature is the sine qua non for the retention of literacy skills in any language. However, it is not just the existence of the literature itself which is important. The corpus of material must be motivating to the reader. Otherwise, he will probably not take time to read it.

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In international languages like English and Spanish an enormous body of literature is available in an infinite variety of subjects. The western world has become accustomed to the availability of written materials. Their appeal is based largely on information, usefulness and entertainment.

The western educational system depends heavily on communicating through the written word. Students are expected to gain from reading information which is useful to life. In contrast, many developing nations' groups, whose cultural learning styles involve observation and imitation, are not reading and following directions from books. If western readers need materials which are motivating and useful, much more so would ethnic minority groups who generally have no long-standing literary tradition.

It is, therefore, a serious question to ask if literacy skills in previously unwritten minority languages can reasonably be expected to continue. I suggest that such a situation will exist only if there exists a motivating or useful body of vernacular literature for vernacular readers. Furthermore, it seems unlikely that vernacular literacy skills will be maintained in contexts where national or international languages provide the practical "instrumental" reading materials necessary for everyday life. The only possibility of the skills being maintained may be in the motivational "sentimental" use of language in written materials which continue to focus on cultural and ethnic identity values in the minority group.

II. Kelman's Concepts of "Sentimental" and "Instrumental" Language Use

In Language as an aid and barrier to involvement in the national system (1971) Herbert Kelman explains "sentimental" motivations as those which embody cultural and group identity. Other sociolinguistic literature uses the term "affective" to explain this idea (Fasold 1984). The word "sentimental" in English may have a weak connotation in its common uses, but Kelman derives his terminology from more ample dictionary definitions:

> ...noble, tender or artistic feeling; that form of feeling in which the soul responds to the good as it comes to man directly through his rational nature; emotions awaked by things that appear to have worth; characterized by sentiment

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> or intellectual emotion; involving or exciting tender emotions or aspirations.....(--Funk and Wagnalls)

"Instrumental" motivations Kelman describes as those which are useful in tangible ways, for instance in getting a job or an education. An instrument, of course, is a tool we use to accomplish a given task. Here the idea is practical function in contrast to sentiment. Minority groups often retain the use of their mother tongues in the home or intimate settings. They may also declaim patriotic poetry in the vernacular for a national holiday. These demonstrate the "sentimental" use of language. However, if a minority-language speaker wants a job in the government or in the capital city, he will demonstrate the appropriate use of the regional or national language, an "instrumental" use.

People's use of language is not necessarily dictated by comprehension or personal preference. Instead, it may be influenced by the purpose of the communication needed, where it occurs, the topic, and the speakers (Fishman 1972). If a speaker of a minority language finds that he cannot feed his family if he speaks only in the mother tongue, he is powerfully motivated to learn the language that will facilitate his getting a paying job. If a child enters school and is punished for or prohibited from using his mother tongue, he soon learns the appropriate language of education. These examples illustrate the "instrumental" use of language. Contrastively, a speaker's purpose may be to identify with the past heroes of his culture or to extol the worth of his ethnic group. In such instances, the mother tongue serves well, a "sentimental" use.

I think that Kelman's use of "sentimental" and "instrumental" gives literacy specialists a valuable perspective on the possibilities for retention of vernacular literacy. We ask the questions: Will mother-tongue speakers of the smaller ethnic languages of the world be motivated to learn literacy skills and retain them if such skills serve no useful (instrumental) purpose? Can we expect minority language speakers to value mother-tongue literature purely from a perspective of cultural pride or ethnic solidarity? My personal experiences as a literacy specialist in Guatemala, Central America, illustrate some of the answers to these perplexing questions.

III. Vernacular Literacy in Guatemala, Central America

Guatemala has the largest population of any of the Central American republics and more than half of the population consists of Mayan ethnic groups. The country presents a complex pattern of sociolinguistic factors. Its history of subjugation by the Spanish conquerors has contributed to poor attitudes towards the twenty-two indigenous languages. The continued dominance of the ladino (mestizo) culture and Spanish language has resulted in decreased cultural vitality for the ethnic groups and in an increased acculturation to the dominant culture. Limited domains of use for the Indian languages have resulted from a long-standing government language policy which sought to discourage Mayan language use (Skinner-Klee 1954). Although there are some encouraging signs of cultural revitalization in the indigenous communities, widespread vernacular literacy does not seem probable.

1. The language situation.

Except for the Garifuna (Carib) of the Caribbean coast, all of the twenty-two indigenous languages of Guatemala are related historically to a common ancestor known as proto-Mayan. Historically, many of these languages were already separated by 1000 A.D. (McQuown 1964.74). Today there are many subdialects in the larger Quichean and Mamean languages which demonstrate considerable linguistic variation (Kaufman 1974).

2. Geography and demography

The majority of Indian language communities are located in the highland area of Guatemala. Population figures show each of five languages to have from 100,000 to nearly one million speakers. Thirteen languages have from 15,000 to 70,000 speakers. Four more have from 2,000 to 5,000 speakers. These ethnic groups are the backbone of hundreds of towns and their surrounding rural hamlets. The people are not united by language group, nor have they been since several hundred years before the Conquest (Campbell, 1979). Instead, their loyalties center around their towns, and their language pride separates them psycholinguistically from other similar dialects. There exist no unifying infrastructures to consolidate the subdialects of one language.

Creating a written literature viable for these endless linguistic variations of one language is a difficult task. In fact, attempts at doing so by the Summer Institute of Linguistics have not often met with rousing success. Since Spanish is the language of the national and regional governments, as well as of education and commerce, the subdialects of Mayan languages have little hope of any "instrumental" use. The local town rivalries do little to present a united and functional front in the face of the prestige of Spanish. Dialectal variations are retained in the home, and are recognized in other areas but not readily accepted in written form.

3. History

Although the ancient Mayas established an advanced civilization, the knowledge of its superiority is little known among its modern descendants. The Spanish conquerors destroyed people and their ancient books. The effect of the conquest was to demoralize the Indian and produce a linguistic and cultural inferiority complex which is still evident.

The indigenous people did retain the use of their languages in the home. In many areas the language served as one of the last bastions against the encroaching outside culture. It was a private and distinctive possession. People had to communicate with each other, so they spoke their ethnic languages, but no one found it necessary to write them. On the contrary, some needed to learn to write Spanish in order to defend and support themselves. The "instrumental" use of Spanish was established. Although a few written documents were encouraged and preserved by astute Catholic priests, e.g. the Pop Wuj,[1] sacred book of the Quiché, no other written domain was maintained for the Indian languages. Today many Indian people have gained written and oral skills in Spanish in order to make sense out of the modern world and to gain a place in the prevailing socioeconomic order.

4. Socioeconomics

The separation of the "ladino" (mestizo) and Indian is a fact of life which affects social and economic areas. To rise in any area of life outside the Indian culture, one must learn to speak and write Spanish fairly well. Earning cash usually involves literacy skills in Spanish.

The plantation system in the coastal plains draws migrant Indian workers from the highlands to the coffee, cotton and sugarcane harvests. Although some groups retain their distinct ethnic identity, the plantation populations are often a mixture of Indian groups. Many turn to Spanish in order to communicate, if their languages are too dissimilar.

A significant number of highland Indians are traveling salesmen, serving as the commercial middlemen between various language communities. If it is necessary to speak one's mother tongue in order to sell merchandise, the "instrumental" use of language takes over. Moreover, Spanish is often used even among speakers of similar dialects, if the parties do not know each other well.

During the colonial and postcolonial periods the Mayas had no hope of climbing the socioeconomic ladder, but they maintained their spoken languages perhaps as an unconscious attempt to preserve their identity. Milroy (1982) hypothesizes that minority language speakers who have strong social network ties maintain their languages, but when these networks begin to break apart through upward social mobility, language death proceeds more quickly. During the last twenty-five years, many Indian groups in Guatemala have experienced increased opportunity for social and economic mobility, because of better education, more bilingualism and increasing urbanization. These have served to break apart some of the Indian ethnic identity and reinforce the "instrumental" use of Spanish as the language of "getting ahead".

5. Politics and government

The task of a government in a modern developing nation may be viewed as twofold. On the one hand, the government seeks to weld its populace into a unified front, loyal to the nation. It creates symbols that are meant to attract loyalty and encourage patriotism. Music, celebrations, flags, national flowers and birds, etc., are used to create a mystic sense of nationhood. This concept has been labeled "nationalism" by Fishman (1969).

The other task of government is to provide for its people the services of education, health, transportation, justice, etc. Huge efforts are required by emerging nations in order to bring order out of

cultural and linguistic diversity and provide basic services to the populace. This idea is called "nationism" by Fishman (1969).

In the face of Guatemala's linguistic diversity, the government has normally tried to use Spanish as the national language to unify and "nationalize" the country. In trying to create the basic elements of a nation, Spanish has also served to unify educational and health services, for instance.

The government has not always succeeded in its "nationalizing" attempts, because the Indian sentiment and cultural values are not normally expressed in Spanish. For instance, town saints' days are usually celebrated with some kind of mother-tongue activity, a "sentimental" use of language. Cultural societies exist in many towns and stress cultural and group identity, but records of their activities are written in Spanish. On the other hand, more of the country's "nationizing" efforts have succeeded, simply because the services had a functional value to the Indian populace. Schools and health centers conducted all their affairs in Spanish, so it was often worth speaking Spanish in order to get the benefits. Of course, lack of comprehension of Spanish has also caused many problems in insuring that government services were really effective. In none of these government activities did either a "sentimental" or "instrumental" written use of the vernacular emerge as an important factor. The bilingual education system, an exception to the previous statement, will be discussed below. Propaganda and ads in the Indian languages are also used in some geographical areas. These are sometimes "instrumental", sometimes "sentimental" in nature.

Political parties have, in recent years, exploited the "sentimental" use of language by having their contenders deliver prepared speeches in some of the vernaculars. One written political symbol was developed in the slogan winak (people), which was supposed to promote unity. These were only sporadic attempts at "nationalizing" and did not last long once the contenders were in office.

6. Religion

The ancient Mayan religion was animistic and was considered by the Catholic conquerors to be pagan. Priests and soldiers saw converting the Indians as a primary task. The Mayas accepted the Catholic religion but combined it with their Mayan rites and customs.

Today the practice of this syncretistic religion is often done in the Indian languages, for instance, in the religious brotherhoods or at the altars on the hilltops. Traditional religion seems to be a viable domain for the vernacular. This is a notable "sentimental" use of language. However, written documents are not very important in traditional religion, since the rites and customs are carried out through a knowledge of past tradition. Most religious records are in Spanish, which has now replaced Latin in the Catholic church.

The Protestant church entered the country in the late 1800's and its first and continuing attempts at evangelization were carried out mainly in Spanish. However, church growth statistics (compiled on Guatemala through Fuller Seminary's Church Growth Institute), indicate that the Mayan Protestant church has grown fastest in the areas where vernacular Scriptures exist--a "sentimental" use of language, and a written one at that. In many areas, though, there has been considerable resistance to the use of the vernacular in various parts of Protestant worship, principally because Spanish has much more prestige for the "sacred mysteries" of religion.

The seeming incongruity of using a language not well understood for religious purposes is explained by the nature of the traditional religion. To the Mayas, ritual and obligation are the core of religious activities. Comprehension has not been important.

Protestant groups who emphasize the Scriptures have enjoyed varying degrees of success in their efforts to promote vernacular worship and Bible reading. Other sociolinguistic factors combined to hinder the wholehearted endorsement of religious vernacular literature by both grass-roots citizens and officialdom. The prestige of Spanish added to the low cultural-linguistic image, the limited domains of use, the lack of support by the government, local language rivalries--all these combined to hinder the written "sentimental" use of the Indian languages.

7. Education

A long history of the use of Spanish in all education has affected the image of the mother tongue as an appropriate vehicle for schooling. In the last twenty years, the slow emergence of a bilingual education program has partially succeeded in changing this view.

At first, the program was avowedly transitional in nature, with the aim to move the child to Spanish as fast as possible, and to facilitate this by using the Indian language to boost comprehension. When the official bilingual education program took hold in 1982, it encountered difficulties on every hand, including the attitudes of the Indian school teachers and parents themselves.

This bilingual education system has projected the parallel use of the vernacular in the public schools through the third grade. At present the materials for the third grade are nearing publication. The bilingual schools (approximately 400) are usually found in areas where Spanish comprehension has been judged too low for students to succeed. The bilingual program appears to provide a genuine use of vernacular in the domain of education. It is almost completely funded by U.S. AID. It remains to be seen how the system will last when the money runs out in 1990. So far the Guatemalan government has given more verbal than budgetary support to the bilingual education concept.

However, the program has potential. If it is successful, it could produce generations of school children who can read in the Indian languages. Even if it doesn't succeed entirely, it will have exposed school children to their own written languages for educational purposes--an unusual "instrumental" use of written vernacular in Guatemala.

Of late, the bilingual program has taken a decidedly nationalistic turn; the Indian element has politely ignored the advice and participation of outsiders, ladinos or foreigners. Much protest and "sentimental" use of language has occurred verbally as many Indian school teachers and leaders in bilingual education have sought to run th e program. However, none of the protests or propaganda have been printed in the vernacular languages.

An important problem for the bilingual teachers is the impossibility of producing vernacular materials in all the dialectal variations of the Indian languages. The four largest Indian groups, Quiché, Cakchiquel, Kekchí and Mam, all have several subdialects. Only the Kekchí have successfully used materials written in the prestige dialect over the rest of the area. The Quiché, Cakchiquel, and Mam have experienced local protests at their attempts to standardize their school materials either in the prestige dialect or in a

sort of pan-dialect version. Standardization is not well understood by pupils and their parents. Since language loyalties are to the local area, rather than to the language group as a whole, standardization is a difficult concept to understand, let alone accept. Spanish, of course, has dialectal variations, but the majority of Indian speakers do not know enough about them to complain, as they do with their own linguistic variations.

8. Culture

As has been discussed above, the indigenous languages are still "alive and well" in the domains of traditional culture and religion, as well as in the home. However, to date, few written documents support this "sentimental" use. Spanish written records have apparently filled the need. No strong oral tradition exists, except in the ritual activities of the shaman and in some of the life-cycle ceremonies such as weddings, funerals, etc. Mother-tongue speakers are basically ignorant of the few written "sentimental" uses of language like the Pop Wuj. The folklore that exists is more of Aztec and European origin than Mayan.

In the last five years a revitalization of the Mayan culture has begun. Generally the revival has centered on the culture, not the language. Perhaps the Mayans are more practical than foreigners, such as Summer Institute of Linguistics (SIL) linguists and literacy specialists, who have expected that a written "instrumental" use of the Indian languages could actually be established. Somehow the need for revitalizing the ethnic identity of the Mayan groups has not always been connected with the written language.

It is true that the production of some more cultural written materials has shown promise for the future. For instance, the Todos Santos Mam booklet on their Mayan heritage is a best seller. In several language communities, though, the most popular booklet in the vernacular is a phrase book designed to teach simple Spanish, an "instrumental" use. Other attempts at "instrumental" literature in the vernacular have not fared so well, probably because the Maya is not used to learning or taking directions from books in any language, let alone his own. Learning is usually done by watching and imitation.

Modern western education, however, has made some impact on traditional learning styles, since its focus is learning from books. It

has been suggested by SIL literacy specialists that written vernacular literature documenting Mayan history, traditional ritual, town histories and artisan specialties could possibly become popular. Since all of these are appropriate domains for the oral "sentimental" use of the vernacular, one might expect that the written form might become popular in these same domains. But not enough experimentation has been carried out yet to prove the hypothesis true. This idea is being tested informally in some language areas.

9. The Mayan Writers Association

This small group (presently fifteen members) has been inspired, founded and trained by SIL personnel since 1974. The Association provides an example of an attempt to foster revitalization of vernacular literacy and literature in Guatemala. The association was originally trained in five-day workshops mainly by SIL literacy specialists of the Quiché and Cakchiquel language areas. It inherited a great deal of vernacular literature which had been prepared by Protestant missionaries and Quiché teachers at the Quiché Bible Institute. Small booklets prepared by SIL personnel in the Quiché area were also distributed from the Writers' Association office. Materials which seemed to sell well at the office (and later bookstore) were a Quiché pedagogical grammar, a diglot dictionary and numerous religious materials such as the New Testament. It appeared that many Quiché speakers were intrigued by the fact that their language could be written down, that it had grammatical structure (like Spanish), that foreigners wanted to learn it, and finally that oral religious concepts could be expressed in writing.

The handful of writers who continued to show interest after the initial training workshops were discontinued (due to lack of funds) seemed far more interested in a revival of cultural and linguistic pride than they were in actually practicing their newly learned skills in reading and writing the vernacular. My husband and I and four SIL literacy specialists spent ten years in trying to help establish the Association. But written texts were usually the most difficult things to produce. The writers and we first thought that they had to produce practical "how-to" type literature ("instrumental") in order to get international funding to sustain the Association. Finally, after I suggested that they forget such booklets and concentrate on cultural and indigenous themes, they began to respond favorably. In the latest project of the Association, the writers have produced eight monthly

bilingual bulletins, one poetry collection and twenty-five weekly radio programs designed to arouse interest in the language, written and oral. The project has had continuing input from an SIL literacy specialist who has spent three to five days a month in training and encouragement.

After six years of involved legal procedures, the Association has received its official legal status in Guatemala. Apparently this recognition was long in coming because the idea of literature in the vernacular was unusual and may therefore have appeared suspect to the government.

Whether or not the Mayan Writers Association can be sustained in any measure of independence from international funds remains to be seen. Even if the writers produce written literature in the "sentimental" domain, they may not succeed as a literature business. Instead, they may serve more to call attention to increasing linguistic and cultural vitality.

IV. Conclusions

The language communities of Guatemala are in various stages along the timeline of acculturation to the dominant though minority culture. Only one of these language communities, the Kekchí, have been very successful with written vernacular materials. The success here has been almost exclusively in the religious domain, although dictionaries and pedagogical grammars, literacy primers and easy-reading materials also exist and are used. Both Protestant and Catholic elements have embraced the religious written literature. The Kekchí situation has not been thoroughly studied and documented, but it is historically documented that the area was taken over in a pacific manner by Bartolome de las Casas, a Catholic priest. He learned the language of the people and encouraged its writing. Perhaps this historical precedent provided enough impetus to continue to the present. A linguistic group in northwest Guatemala, the Chuj, exhibits some limited success in translated religious materials, but there is very little "instrumental" literature which has taken hold.

The increasing explosion of interest in the media has opened up even the most remote areas of Guatemala to the radio. Although most programming is in Spanish, some vernacular programs (mostly

religious) exist. Television is spreading fast, and Spanish newspapers travel by bus and truck to the farthest areas. The opportunities to hear Spanish spoken and see it written are everywhere. Will it be possible for vernacular literacy and literature to become cultural values in the face of the all-pervading Spanish media?

It appears that if the answer to that question is affirmative, the "sentimental" use of the language (in those communities where the indigenous tongue is still viable) will be the principal means by which the affirmative becomes a reality.

Such a use may spread to the written form. In the meantime, an increased emphasis on oral communication of "sentimental" themes could well prepare the way for the acceptance of written forms of those same themes in the languages. The use of the radio would be the best present option. Cassette players and recorders are also growing in popularity. With the spread of television and the imminent arrival of transistorized TV in the rural hamlets, the audiovisual channels could be exploited to encourage vernacular use. Programming on Mayan history, ritual, customs, dress, and religion could be tried. Although several linguists and anthropologists and even artists have recorded the glories and complexities of the indigenous cultures and languages, these records have all appeared in Spanish, English, German, French, etc. Relatively little has actually been documented in the Mayan languages about the Mayan languages and culture.

Obviously vernacular literacy skills cannot be retained without a supply of vernacular literature to read. If the "sentimental" use of language can motivate literature production, how many would really read the result? Perhaps it is time to return to the old Mayan custom of training a core of specialists to read and write in the vernacular. These would digest and communicate the contents of written materials in the Indian languages to the average community member. It would not even be necessary to establish a critical mass of readers and writers, just an elite group of reading and writing specialists. In a recent paper, Christian education in a Mayan context (1987), Paul Hoiland suggested the idea of a core of reading specialists. Hoiland conceived the idea after researching the inappropriate cultural methods used by many modern missionaries, Catholic and Protestant, for impacting Mayan communities. Searching for a more culturally relevant entrance to the Indian community, Hoiland noted that the

ancient Mayans created a highly complex writing system and historical, cultural, scientific and artistic records, but they used only a core of specialists to perpetuate the system.

In the Hebrew culture of the Old Testament, the majority of people did not read. Their religious documents were read and interpreted to them by a core of specialists. This can be seen in the books of Ezra and Nehemiah where the leaders gathered the people for long days of public reading of the Torah in order to communicate God's message.

We do not judge the ancient Hebrew or other ancient cultures as incomplete because all of their citizens did not read. Of course, the impact of Western democratic concepts such as universal literacy affects emerging nations, so that most seek to raise their literacy rates. Since reading is the principal means for the attainment of functional, practical goals in a nation, it seems that Spanish literature is the logical choice for Guatemala.

Although the western dream of universal literacy may not come to fruition in modern developing nations, it may be possible to stimulate a written literature which unites and strengthens the ethnic identity of minority cultures. This stimulation should be concentrated in the "sentimental" use of written and oral language. Perhaps only in this way can vernacular literacy be retained at all in a complex sociolinguistic situation such as exists in Guatemala. Kelman's parameters should serve literacy specialists well. A consideration of these parameters should restrain them from futile efforts in trying to develop "instrumental" written literature in a language whose domains of use suggest stronger possibilities in the "sentimental" realm.

Notes

1. Different authors refer to the Pop Wuj under different names: Popol Vuj, Popul Wuj, Pop Vuj. I have chosen to use the term used by the late Adrian Inez Chavez, a Quiché.

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VERNACULAR LITERACY, ENGLISH AS A LANGUAGE OF WIDER COMMUNICATION, AND LANGUAGE SHIFT IN AMERICAN SAMOA

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Abstract. The role of first language literacy for language minority students has undergone renewed scrutiny over the past few years. In places where the indigenous population does not speak a world language natively, the question facing educational policy makers is how best to maintain the vernacular while preparing its youth to function in the larger world community. In territories under colonial rule, the accommodation of a foreign national policy to the local situation complicates the issue.

The current paper represents an historical examination of language policy within the social, political and economic context of language use in American Samoa. It is argued that the success of vernacular literacy in the last century can be attributed at least in part to the compatibility of new literacy events with existing oral genres and to the maintenance of local control over the educational system which was the vehicle for the acquisition of literacy skills. This is in contrast to the introduction of English as a language of wider communication in the Twentieth Century, which has involved new sets of literacy events and political, economic and educational systems beyond the control of those affected by educational policy. Currently, evidence suggests that American Samoa is experiencing both language shift and native language skill attrition.

Introduction

The role of first language literacy for language minority children has, over the last few years, undergone renewed scrutiny in the United States and elsewhere. In the United States, linguists who once advocated universal first language literacy are much more cautious in their claims, and educators are less insistent than they once might

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have been that reading be taught in the child's home language first (Spolsky, 1981).

In the U.S. territories and trusteeships, however, first language literacy for indigenous populations has been a central issue since the establishment of Western style education systems. In these political entities, where the bulk of the budget for education comes from the Federal government, where the vast majority of school-aged children are directly affected by Federal policies and programmes for "language minority" children in the United States, and where within the current generation the administration of the local education agencies has shifted from colonial to indigenous control, the current debate is not on whether to teach the vernacular and vernacular literacy (the educational goals in virtually all of these political entities explicitly mention the retention of the indigenous language and culture), but rather on when to introduce it and for how long to teach it in relation to English.

Recent research suggests that informed decisions affecting language policy and planning must be sensitive to the relations between oral and written language uses, the roles they play in the transmission of knowledge in society, the ways in which literate forms have been incorporated into the communicative networks of a society, and the cultural consequences of the introduction and extension of literacy (Heath, 1984). Historical reexaminations of the interface between language policy and language use can provide the historical context to be taken into consideration in determining contemporary language policy. They can also contribute to the development of a "sociolinguistics of literacy" (Spolsky, 1982) by adding to our understanding of the relationship between the development and maintenance of vernacular literacy and the introduction and spread of a language of wider communication (LWC), as well as the non-linguistic and non-educational forces which influence them.

The current paper reviews the implementation of language education policy in American Samoa from an historical perspective. The study of the interface of language policy and language use in American Samoa is a particularly interesting case for a number of reasons. First, vernacular literacy has enjoyed nearly universal acceptance almost from the first introduction of literacy about 150 years ago. Second, for well over three quarters of a century, English education has been less successful despite a variety of approaches

taken. Third, although Samoa has felt the cultural effects of the west since the arrival of the first missionaries, recently there have been indications of a shift in patterns of use of language from Samoan to English. Whether or not the effects of that shift will be viewed as beneficial by those affected will depend on the extent to which, and the domains in which, that shift occurs. This in turn will be influenced by language policies implemented both in American Samoa and by the federal government. The situation in American Samoa, therefore, presents a challenge to those in a position to shape language policy--the community, local legislators and administrators, and federal administrators--to bring a sociolinguistics of literacy to bear on the formation of that policy. At the same time, it provides comparative data for sociolinguists constructing a sociolinguistics of literacy.

The Current Situation

The population of American Samoa is currently estimated at 34,000 (U.S. Department of Commerce, 1984), over ten thousand of whom live in the major commercial centre, Pago Pago. Although the first language of 90% of the population is Samoan, many children of Samoans returning from extended periods of residence in Hawaii or California (van Naerssen, 1979) speak English as a first language. Evidence suggests that increasingly Samoa-born Samoans do so as well.

To serve these students, the American Samoa Department of Education administers 24 elementary (levels 1-8) and four high schools located on five islands. The public school system has never engaged in widespread importation of foreign teachers and, except for the earliest years, the majority of teachers in the public schools have been Samoan. Since 1970, the top administrators in the Department of Education have also been Samoan. The Director of Education is appointed by the governor, who in turn is elected by popular vote. There is no elected board of education. The Director of Education is accountable only to the governor for educational policy and personnel decisions, although he is constrained by federal guidelines and restrictions accompanying various titles and grants from the federal government.

Because a sizeable percentage of the public school population in American Samoa has spent time in the States and an even larger

number will leave Samoa for the States, either to continue studying or to find employment, the American Samoa Department of Education is faced with the task of preparing both Samoa- and stateside-born students for possible eventual continued schooling or employment in the United States and/or for life in Samoa. The Department of Education's stated goal is that each student should become "a fluent literate bilingual in Samoan and English" with "a respect for Samoan traditions and culture" in order to "foster the economic well-being of American Samoa, while at the same time, to prepare each individual for a personally satisfying and socially useful life wherever he chooses to live" (Department of Education, 1974).

To meet this dual goal, English is the primary language of instruction and has been since the beginning of the public school system at the turn of this century. In the 1950s, Samoan was officially sanctioned for use as a medium of instruction in a transitional function in the lower grades. This did not represent a major policy shift so much as a recognition of what was already taking place in the classrooms. In 1965 Samoan language arts was introduced as a subject and a Samoan language arts curriculum has been developed through the use of federal E.S.E.A. Title VII funds.

Bilingual education as practised in American Samoa is ostensibly transitional in nature, with Samoan used to teach all subject matter in the first grade, and with English gradually replacing Samoan until, at the high school level, students are to function in a monolingual English classroom and Samoan language arts is the only subject taught in the native language.

The extent to which the vernacular is actually used, however, varies from classroom to classroom and is the focus of much debate. While some suggest that the use of Samoan may not be as great as programme descriptions prescribe (Niyekawa-Howard, 1972), others fear that there is too much Samoan used in the classroom (*Samoa News*, 1985). Those arguing for more native language use point to decreasing Samoan language arts skills, loss of cultural values and inability to compete in an entirely English curriculum as evidence of need for the native language. Those advocating more English argue that because of the presence of nearby Western Samoa, where cultural traditions are more forcefully preserved, the Samoan language will not experience the death that Hawaiian has. Their motivation for English is instrumental (Gardner & Lambert, 1972), to

compete academically at a level matching stateside standards. From this perspective, increased English proficiency is directly proportional to amount of classroom exposure to it.

Within the broader social context, there is evidence to suggest that language use patterns in American Samoa are changing and that the domains of English language use are spreading, while the level of first language literacy skills is declining. A recent survey of high school graduates reports that although daily business is conducted primarily in Samoan, with English used when foreigners are present, 30% of those surveyed used either Samoan and English or mostly English in extended family situations. In situations with best friends, classmates, teachers and shopkeepers, 80% reported using either both Samoan and English or mostly English. In impersonal situations such as "writing, homework, listening to the radio or television" (Baldauf, 1982:2), 92% of the sample reported using English predominantly. If this poll is correct, American Samoa is experiencing a "gradual displacement of one language by another in the lives of the community members" (Dorian, 1982:44).

This language shift has been accompanied by native language skill attrition, or "loss of proficiency in one or more of the skills (writing, reading, understanding or speaking) in L1..." (Oxford, 1982:120). As early as 1932, while nearly 100% of the Samoan population was reportedly literate, "aspects of ceremonial life were breaking down and special terminology applied to chiefs was passing" (Keesing, 1932:309; also see Midkiff *et al.*, 1956:17). More recent evidence that native language proficiency is declining is found both in student performance data and in community concern about language education. In 1973, two criterion reference tests were administered to students through twelfth grade, one to measure "Samoan material culture, traditional social structure, and oral literature," and the other Samoan language reading proficiency. Results were well below what a panel of Samoan educators felt was reasonable for grades two through twelve. In addition, a Department of Education sponsored community survey conducted in 1972-73 revealed that, along with the English language, the area that was felt to be in greatest need of improvement was Samoan language and culture (Thomas, 1981:45-46).

While English is spreading as a spoken language, the academic English proficiency (Cummins, 1981) and Samoan language arts skills are seen to be inadequate for contemporary needs. Low achievement

in both Samoan and English language skills has been cited as one cause of Samoan students' failure to function in an English-speaking society (NOSA, 1985:7-8).

This has led at least one educator to conclude that "most Samoan youths cannot be prepared to compete at a highly successful level in both Samoan culture and stateside culture". He recommends that when two objectives of the biculturality/bilinguality goals of each of the cultures compete, language planners "need to select which one out of each pair of incompatible objectives the schools will promote and which will be abandoned or discouraged" (Thomas, 1981:48). Such a solution presupposes an irreconcilable conflict inherent in bilingualism and biculturalism. When combined with the "more equals better" approach to English instruction, it exacerbates the situation of declining Samoan language skills by artificially restricting the use of Samoan and imposing the use of English where that language might not naturally occur.

An alternative is to look at social, political and economic, as well as linguistic and educational, factors which have contributed to native language literacy, the decline of native language skills, and the shift in status of English from language of wider communication to mother tongue in order to better understand those processes and to plan educational programmes consistent with those goals.

The Context for and Consequences of Vernacular Literacy

The first schools in American Samoa were established in the 1830s by missionaries from the London Missionary Society. Thus, a study of the effects of implementation of a programme of vernacular literacy cannot be removed from the role of the church in American Samoa. Institutions existing at the time included the traditional forms of government and education organized around the village.

When the missionaries first arrived in Samoa, they found a society organized around semi-independent villages loosely bound together through district councils. There was little or no central authority representing all Samoans (Williams, 1946:454-55). Villages were sustained through working the extended family's plantation, supplemented by fishing and hunting.

The missionaries found the Samoan people possessed of "wit, ingenuity, quickness of perception, a tenacious memory, a thirst for knowledge when its value is perceived, a clear discernment and high appreciation of the useful; readiness in acquiring new and valuable arts; great precision and force in the expression of their thoughts, and occasional bursts of eloquence of a high order..." (Williams, 1846:441). Verbal creativity was evidenced in their everyday use of puns, proverbs and similes as well as in the highly stylized formal speeches of ceremonial occasions.

These qualities and skills were not only highly valued but also greatly rewarded in the traditional social hierarchical structure of the village. Within each village, decisions affecting both intra- and inter-village relations were made by a village council, or *fono*, consisting of *matai* (chiefs) from each extended family in the village, who exercised authority over every individual under their protection, parcelling out work tasks, food, and punishment for wrong-doing. Matai titles remained within the specific extended family, and holders of these titles were selected by the family (*ua malilie le aiga*) on the basis of service to the family, individual intelligence, initiative, age, respect from others, knowledge of ceremonial protocol, knowledge of myths and legends, and skill at oratory (Holmes, 1974:21).

The value placed on oratorical skill can be seen in the *a'a ti*, one of the first tests of a matai upon selection. In this speech delivered before the *fono*, the new matai was 'expected to show his wisdom and his grasp of oratorical protocol and expertise in turning a phrase or alluding to a mythological or legendary event" (Holmes, 1974:21). An unacceptable performance was ground for refusing to recognize his right to sit on the council.

The best examples of oratory as fine art, however, were demonstrated by the *tulafale* or talking chiefs, who were aligned to matais, for whom they functioned as councillors and whom they represented, both within the village and beyond, as ambassadors and spokespersons. The duties of a talking chief included accompanying his mattai on visits to other villages and welcoming visiting parties to his own (Turner, 1861; Mead, 1928). They were also responsible for the delivery of the *lauga*, a genre of ceremonial speech which opened every meeting of the fono and was used on other occasions as well. It usually contained the official list of names and titles of the village chiefs (*fa'alupega*) as well as mythological and metaphorical

references to past historical events and to the current social and political structure of the village (Duranti, 1981). The tulafale were also the poets of Samoan society, creating verse (*solo*) characterized by rhyming couplets, a predictable metre, and allusions to myths and legends. A high chief had much to gain when the *tulafale* he used was skilled.

Thus, although the Samoans had not developed a writing system for their language before the arrival of the missionaries, they had developed a highly literary style of spoken discourse (Tannen, 1982) upon which great value was placed.

Traditional Samoan education within this setting involved the acculturation of the young into the roles described above, and the cultural values, knowledge and skills entailed in those roles. As such, the function of teaching also differed from established Western concepts in that teaching was tied to particular relationships between "teachers" (*tufuga*) and those being taught. Older siblings took on much of the responsibility of socializing younger siblings. The master craftsman, hunter, fisher, etc. taught his skill to those who sought it. In short, teaching was "a function rather than a determinant of status in the group" (Sanchez, 1956:125).

Within this context the missionaries established the first Western schools, the goals of which were to (1) spread the word of God, and (2) to give the Samoans the vehicle by which to receive it - literacy. The curriculum consisted of vernacular reading, writing and spelling, arithmetic, grammar, geography and religion. The medium of instruction was Samoan. These schools were usually set up in either the local church or in the home of the teacher, who was also the preacher. Thus the identification of school with church was virtually inextricable.

Despite the lack of a written tradition (and consequently any functions for it) in the traditional Samoan society, despite minimal financial support from the London Missionary Society (Turner, 1861:158-59), and despite a lack of trained teachers (p. 121), by 1839 there were 10,000 literate Samoans. By 1850, 15,000 copies of the New Testament had been published in Samoan; five years later, another 10,000 copies of a revised edition were in print (Turner, 1861:170-71). Although the accuracy of population data for that time is difficult to assess, Oliver (1951:211) estimates the population of

Samoa in 1851 to have been 56,000. If these figures even approximate the actual population, they suggest almost universal access to written text.

Similar success rates have been described for the introduction of vernacular literacy in other Polynesian societies (Spolsky *et al.*, 1983; Huebner, 1985). Spolsky *et al.* list five conditions which must apply for the successful introduction of vernacular literacy: (1) willingness by those introducing literacy to have literacy in the vernacular; (2) perceived utility of literacy by traditionally influential members of the community; (3) the establishment of native functions for literacy; (4) the continued widespread use of the vernacular as a spoken language; and (5) the support of the maintenance of vernacular literacy by a powerful educational system under local control.

The Protestant missionaries to Samoa, like those elsewhere in the Pacific, were, in fact, eager to introduce literacy in the vernacular. Support for the mission schools came from the matais, the decision makers in the existing institution, the village. Because literacy and schooling were so closely tied to Christianity, it is impossible to understand that support apart from a consideration of the reciprocal relations between literacy and the role of Christianity in Samoa. The fact that literacy was made a prerequisite for church membership cannot be overlooked as a motivation for learning the written word.

Church membership was highly desirable. Churches were organized around villages (Gilson, 1970:98) and since the matai often served as deacons and elders in the church, Christianity provided additional institutional support for the existing political structure. The practice of monthly intervillage services provided an opportunity for those deacons/matais to demonstrate their position beyond the village. Second, Christianity provided an additional literature to draw upon for oratory in the fono and elsewhere. Moreover members of the congregation were often called upon to give sermons, thereby providing a new forum to display oratorical skill (Holmes, 1974:60-62). Thus, aside from any intrinsic appeal of its philosophy, the benefits of Christianity to the existing social structure were considerable.

At the same time the material, personal and institutional costs (Berman & McLaughlin, 1974) were minimal. Material costs took the form of materials and labour to build the necessary structures and

consumable goods needed to sustain the preacher/teacher. In a land which provided ample resources for subsistence, these were negligible.

Because the villages built the structures of worship (and of schooling), the physical plants reflected cultural norms and values already in existence. Moreover, the schools taught only that knowledge and those skills which were not available through existing modes of education. They did not attempt to teach those skills and to pass on that knowledge which were being taught and passed on already through traditional channels. The craftsman still had his place. Furthermore, the schedules of the schools were compatible with this approach, providing universal access to literacy while allowing all villagers time to pursue their other interests, tasks and duties. Thus, within the village the arrival of a new Samoan pastor caused minimal changes in the village hierarchy. All these factors can be seen as contributing to the appeal of Christianity and the success of literacy can be seen in part as a result of that appeal.

With the establishment of the church came a new set of vernacular literacy events (Heath, 1983). A typical service consisted of readings from the Samoan Bible, hymns from hymnals, a sermon, and an offering. Members of the congregation (and the community) were involved in each of these activities. During the offering, the deacons would read the church roll and, as each family presented its offering, would announce it to the congregation and record it. The literacy skills involved in the church consisted not just of the reading of religious texts but also at least a modicum of book-keeping (Holmes, 1974:71). Family Bible reading became a regular evening activity.

Many of these functions of literacy appear to have been compatible with existing pre-literacy events. The book-keeping activity was similar to existing oral activities conducted at ceremonial events prior to the introduction of literacy. Moreover, the literary style of the scriptures and sermons, characterized as they were by the use of proverbs, similes and highly stylized language, shared many features with traditional public oratory.

Institutional functions for vernacular literacy outside the church, however, appear to have been limited. There is evidence that this new skill was used for love notes during courtship (Pritchard,

1866:139) but oral speeches, even those at religious functions, appear to have been committed to memory or performed extemporaneously, rather than composed in writing and then read. While the harbours of Apia and Pago Pago were developing into minor commercial centres, the businesses there were controlled by foreigners and consequently most literacy events associated with them were in European languages. Although the British drew up and presented to the chiefs for adoption a set of port regulations (Gilson, 1970:149), there was no government bureaucracy dependent on forms and reports and the language of commerce was English. Vernacular print seems to have been reserved primarily for scriptures, prayer books and primers.

Samoan literacy was supported by a powerful school system under local control. With the introduction of Christianity, the matai system not only remained intact, but in fact enjoyed a measure of control over the new institution, since its representatives were totally dependent upon the generosity of the village matais for their lodging and food. Congregational rule gave the village congregations an even greater independence, which contributed to the nativisation of the institution (Oliver, 1951:213; Gilson 1970:127-37).

The strength of the new school system can be seen from the fact that by 1850 over 150 Samoan teachers were in place in village schools throughout Samoa (Gilson, 1970:102). For more than 50 years after that, church-affiliated schools provided the only western-style instruction in Samoa. Even after the introduction of universal free public education in this century, the pastors' schools continued to provide the only source of formal instruction in native language literacy (Wallace, 1964:167), with children attending them each day before and after their regular public schooling. Recently, however, the influence of these schools has declined (see below).

The context for the successful introduction of vernacular literacy in American Samoa was consistent with those found in other similarly successful situations. The consequences of it were Church membership. While Christianity changed the everyday lives of the Samoans, their dress, the distribution and allocation of time, the art forms, the objects of everyday use, and the patterns of language use, from 1830 until the beginning of colonial administration, there was little need for anything but the vernacular as a spoken language outside the port towns of Apia and Pago Pago.

The Introduction of English as a Language of Wider Communication

Just as vernacular literacy cannot be viewed apart form the role of the Christian church in Samoa, so, too, English as a LWC cannot be divorced from the role and effects of the U. S. naval administration. Although the colonial government established secular schools to teach English, those schools did not enjoy the same popularity as the pastors' schools.

For more than three generations before the islands of Tutuila and Aunu'u were ceded to the U.S. government in 1900, western powers were exerting influence in the islands. The early missionaries were accompanied or followed by merchants and military looking for markets, good harbours and natural resources. In Apia, the major port, the foreign population had grown to about 350 by 1860, and remained constant during the last quarter of that century (Gilson, 1970:403n). A smaller settlement had formed in Pago Pago. Tensions among British, German and American interests, vying for port and trade privileges, led to the Treaty of Berlin of 1899 in which Germany and Britain renounced all claims to the islands east of longitude 171 degrees west of Greenwich. In return, the U.S. renounced all claims west of that line. Thus, the political entities known as German (later Western) Samoa and American Samoa came into existence (Oliver, 1951; Gilson, 1970).

The population of American Samoa in 1900 has been estimated at 5,679 (U.S. Dept. of Commerce, 1984). Outside the ports, the internal administration of villages and districts was little affected by international jockeying for port privileges. According to a naval account of that period:

> In the Samoan society, the village, composed of 30 to 40 households, represented the basic social political unit. There was no apparent central governmental machinery, no written law, no predominant political figure exercising leadership over the whole of the area defined as American Samoa... In 1900, ...government...was the concern of family and community leaders... The leadership among the Samoans was in the hands of chiefs, known as Matais... It was apparent to the [U.S. Naval] Commandant that he would have to start from the beginning in developing a political sense among the leaders (Darden, 1952:xii).

Thus the U.S. naval administration had a clear mission: the establishment of a government bureaucracy and an educational system to support it.

On the first front, the navy commander, who was the *ex officio* governor, recommended the establishment of the position of Secretary of Native Affairs, whose duties included supervision of all Samoan government employees (Darden, 1952:8). By 1913 Departments of Judiciary, Treasury, Interior, Agriculture and Public Health were established, all administered by American navy personnel. Village chiefs (still elected by village matai but now subject to approval by the governor), county chiefs, district governors and district judges (all appointed by the governor), received either salaries or a portion of the fines and fees collected as a part of their duty. Finally the navy also hired a Samoan guard (the *Fita Fita*) whose duties included acting as prison guards, radio operators, yeomen[1], hospitalmen, cooks, fire fighters, chauffeurs, butchers, mess cooks, truck drivers, stewards, orderlies, enginemen and boat crews. This marked the beginning of foreign government, of somewhat more widespread access to the monetary system through jobs, and of government as major employer in American Samoa.

In 1917, the regulations and orders which had evolved over the previous 16 years were codified in English and four years later were translated into Samoan. These rules and regulations were often in conflict with traditional modes of governance. For example, one law forbade the imposition of fines levied by matai on villagers committing offences, thus curtailing some of the traditional powers of the Samoan chiefs.

The regulations and orders entailed a set of literacy events which, unlike those introduced by the church, were alien to existing ways of speaking in traditional Samoan society. They included: 1) written records of all regulations enacted by village fono; 2) written records of all village fone proceedings and laws, to be forwarded to district chiefs; 3) written records of all cases tried before the village magistrate; 4) written warrants for arrests; 6) marriage licences and certificates; 7) registration of matai titles; 8) monthly audits of government offices; 9) letters from probate court assigning executor of estates; 10) building permits; 11) licences for firearms, livestock, dogs, and the importation of goods; 12) Bank of Samoa cheque and saving account books; and 13) salaries of magistrates, clerks of courts and

police based on a percentage of fines imposed (Noble, 1921). It is unlikely that all of these literacy events were conducted in English. However, with the establishment of a centralized top layer of bureaucracy by a colonial power came the establishment of English as the "unmarked" (Fishman, 1980; Spolsky, 1982) language of (at least central) government. The Codification of Regulations and Orders, for example, stipulates that in the case of a dispute over the interpretation of the Samoan and English versions of the texts, "The English shall govern the decision of all cases" (Noble, 1921:1). Furthermore, while both an American and a Samoan judge presided over the district courts, in the case of a difference of opinion between them, "the opinion of the American district judge shall prevail..." (Noble, 1921:4).

With the establishment of a western government and a navy station, the increasing reliance on a monetary society and the rise of commercial centres created a demand for at least some proficiency in English. By 1922, Pago Pago had grown to a town of 568 people and eight retail businesses, each grossing more than $500 per month (5 with more than $2000 in monthly sales). Smaller commercial centres were in Leone and Fagatogo. The economic advantage afforded by facility in English as much as the necessity to use it acted as a catalyst for the spread of English as a language of wider communication. In 1932 Keesing reports "...contemporary Samoan affairs show that at a certain point it becomes no longer convenient, economical, or profitable to use the vernacular. Around the urban centres, Apia and Pago Pago, where whites and mixed bloods are concentrated, Samoan leaders and young people find that they can make their way better in matters not purely Samoan if they can understand and use English" (1932:308). At the outbreak of World War II, approximately 10% of all adult Samoan men in American Samoa were employed at the naval station. During the war, the need for salaried labour grew and "almost every able-bodied male Samoan was either a member of the armed forces or in the employ thereof" (Navy Department, 1947:13).

The employment of Samoans by the Navy was a motivating factor in the establishment of a public English medium school system and ultimately set the stage for the dramatic demographic changes which were to occur a half century later. Establishment and maintenance of a government bureaucracy and employment of local labour entailed some degree of English proficiency among at least a portion of the

population. Although the naval administration found in 1901 fifty-seven religious schools in operation in American Samoa and "a greater degree of literacy among the Samoan people in their own language than among Americans in the United States in the English language," (Darden, 1951:27), the Acting Commandant wrote, "There should be a school system established under governmental control and all children should be taught to speak English" (p. 28). Moreover, as early as 1903 there were requests from the expatriate and part-Samoan communities in the Pago Pago Bay area for a system of public education for their children. They argued that there were also many Samoan children in the vicinity who would profit from such a school (Gray, 1960:174). Thus, support for a system of public education in American Samoa came first from two groups for two purposes: from the colonial government for English proficiency among Samoans who worked for the government for English proficiency among Samoans who worked for the government or had dealings with it, and from the merchant community as a vehicle for providing their children with an education comparable to one they might receive in the U.S.

In 1904, the first government school was established, "intended principally for the purpose of teaching Samoans the English Language" (from a circular letter from the Station Commandant, dated November 20, 1903 and cited in Sanchez, 1956:79). Unlike the mission schools, this was staffed by women navy dependants. In 1911, a five-member Board of Education was appointed by the governor. It consisted of three naval officers and two representatives from merchant families in Pago Pago, with the Naval Station Chaplain as Superintendent. From the beginning, the public school system was, in contrast to the pastors' schools, beyond the control of the local matai.

Because of the lack of support from the federal government (Gray, 1960:175-76), the lack of an economic base locally, and the change in navy administration every two years (Oliver, 1951:333), the schools were slow to start (Bryan, 1927,80-92). But by 1922, eighteen more schools had been added to the system, employing 24 Samoan teachers and five Americans and listing 1,500 students enrolled. By the 1930's, there were 34 public schools, enrolling over 2,000 students and employing 54 teachers, the bulk of whom were Samoan. By fiscal year 1946, the total number of public schools in American Samoa had risen to 46, employing 99 Samoan and 6 "imported" teachers (Navy Department, 1947:22).

In addition to the goal of English proficiency, these schools shared the Americanization objectives popular among schools and districts in the United States at the time (Thomas, 1981:41). Public education was coeducational and students were graded by age. Attendance at either a religious or a government school was made mandatory for all children between the ages of 6 and 13 (Noble, 1921:27). The curriculum was based on those of United States schools. Not only were things Samoan excluded, the content of instruction overlapped with that of the already established pastors' schools.

Not surprisingly, support for the public schools among the general population was mixed at best. For the first three decades of naval administration, the pastors' schools remained the most influential institution of formal schooling in American Samoa. In 1922, students enrolled in government schools represented only 15% of the total student population. In 1927, concerned about the quality of English education and the qualifications of the teachers (Gray, 1960:233), the territorial fono, which functioned only in an advisory capacity to the governor, entertained a resolution to recommend the curtailment of public education. Outside observers, too, found the English learned in the public schools "of very meagre and specialized kinds: sailor conversation, trader talk, tourist comments, movie titles, and simple lessons at school" (Keesing, 1932:312). Around the same time, a committee of educators from the United States funded through the Barstow Foundation issued a critical report on the effects of public education on the social organization in Samoa and set up and conducted a private boys' boarding school to develop a curriculum and textbooks which, it was hoped, would be "a step toward the production of good textual material for the public schools" (Midkiff *et al.*, 1956:38).

In response to pressures from the matai and the Barstow Foundation, the Department of Education formulated a language education policy, the goals of which have remained in effect until today:

(1) to give all children of American Samoa an elementary education in the English language, which will open to them the vast field of the knowledge which the Samoan language at present cannot and perhaps never will touch, and

(2) to make them increasingly conscious and proud of their own Samoan heritage of arts, crafts, customs and culture, in the hope that these may not disintegrate under the influence of increasing contact with the world beyond.

This new policy had little institutional effect on the bureaucratic structure of the Department of Education or the territorial government, but did entail a new curriculum and a changing role for the teacher in the school and in the village. Emphasis was placed on arts and crafts and the "technological basis of the elementary school curriculum" (Department of Education, 1941). By assuming the task of teaching Samoan arts and crafts, the teacher, who lacked expertise in these ares, "ran the risk of competing with experts and hence getting their opposition and also being accused by the matais and the village of precocity" (Sanchez, 1956:146). This had repercussions in the ways the community viewed the teacher and consequently in the ways the students responded to the teacher. Ironically, in an attempt to reintroduce aspects of Samoan culture into the classroom, colonial curriculum planners achieved just the opposite effect by failing to recognize and be sensitive to traditional institutions and roles.

The outbreak of World War II not only interrupted the schooling of many children, but also had a lasting effect on both the educational system and Samoan society in general in the years to follow. The need for labour drew many teachers away from the profession. Following the war, schools which had been closed were reopened. The curriculum remained the same as that in effect before the war and English continued as the official language of instruction. A Navy Department policy letter in 1948, however, recognized a place for the vernacular in the curriculum: "Education programs shall foster and encourage instruction in the native language and history and in native arts and crafts. Instruction in the English language for inhabitants of all ages is a prime necessity but this is not to be construed as discouraging instruction in native languages and culture" (cited in Darden, 1952:33).

The introduction of English as a language of wider communication through the schools was at best only partially successful during the first half century of the public education. Some features of the context which may have influenced the outcomes are: 1) that it was initially introduced for functions which were alien to existing speech and literacy events; 2) that it was supported by a

school system which was beyond local control, which advocated norms alien to the local culture, and which was in direct competition with an already existing, popular system; and 3) that there was no opportunity outside school for exposure to or use of the language.

The Spread of English as a Mother Tongue

Fishman, Cooper & Rosenbaum (1977) question whether the features accompanying the imposition of languages of wider communication are the same as those identified as contributing to the spread of Arabic, Greek and Latin as mother tongues in the past, namely the imposition of military rule, extended duration of military authority, linguistic diversity among the indigenous population, and material incentives associated with the learning of the new language. In American Samoa, the last of these outweighs the others in influencing the spread of English as a mother tongue.

The U.S. Navy continued to govern the islands until 1950, when the administration was turned over to the U.S. Department of Interior. Although for a generation after that, top administrative officials within the government of American Samoa were U.S. federal appointees, this is not comparable to the several centuries of military authority that accompanied the spread of Arabic, Greek and Latin.

Nor can language shift in American Samoa be viewed as a result of the need for a *lingua franca* for a multilingual community. Unlike Hawaii, which experienced large-scale importation of indentured labourers from Asia and Europe, the population of American Samoa has been relatively homogeneous linguistically. Even those Samoan born and/or raised in the United States who speak English as their mother tongue have relatives in Samoa who speak Samoan. Rather, the break in linguistic traditions in American Samoa is a result of the economic opportunities which have, over the past two generations, led to the changing demographic facts of that territory.

Economic conditions after the war and subsequent departure of the navy resulted in large scale emigration from American Samoa to Hawaii and the U.S. mainland. After the war and the discharge of Samoans from the military, the number of Samoans living in American Samoa and employed for wages dropped to less than 10% of the estimated 17,000 total population. The economic decline from

previous periods was made worse by a drop in the world price for copra.

The transfer of administrative responsibility for American Samoa from the Navy Department to the Department of the Interior in 1951 exacerbated an already depressed situation. The reduction in government payroll resulted in a drop in local employment in private enterprise. By 1952, it was reported that fewer than 200 Samoans were employed outside the government. Samoans accustomed to working for wages looked elsewhere for employment and emigration figures for that year alone were estimated as high as 1500 (Holmes, 1974:105), over a 500% increase from the years before. Continued emigration has led to the establishment of large Samoan communities, especially in California and Hawaii (NOSA, 1985). Within the last generation, the reverse migration (from the United States to Samoa), motivated by availability of government jobs or jobs in tourism and other commercial enterprises, has been one cause of the break in linguistic traditions in American Samoa.

The spread of technology has also contributed to the language shift. In the 1960s, educational television was introduced in the public schools in order to facilitate the learning of English. The development and demise of this programme have been well documented (Wallace, 1964; Kaiser, 1965; Platt, 1969; Nelson, 1970; Anderson, 1977; Baldauf, 1981) but the decision to implement this "bold experiment" (Schramm *et al.*, 1981) initiated a chain of effects on the everyday lives of Samoans matched only perhaps by the impact of Christianity a century before.

The implementation of educational television required the installation of electricity in virtually all villages, which in turn necessitated the construction of new roads. All of this generated new jobs, both in government and in the private sector. In 1970 on the island of Tutuila, almost 5,000 individuals were employed for wages (Holmes, 1974:101).

The introduction of television to American Samoa has also created new domains for English. In 1979, it was reported that there was one television set for every six persons and nearly one radio for every person in American Samoa (U.N., 1983). Most of what is broadcast comes from Hawaii and only 12% of the evening programming is in Samoan. This, together with the fact that the only

daily newspaper in American Samoa (circulation 10,000, or one paper for every three or four people) prints 88% of its articles in English (Baldauf, 1982), indicates that the unmarked language of mass media in American Samoa is English.

Finally, the introduction of universal television, together with the establishment of many new and different Protestant sects in Samoa, has also contributed to the decline in attendance at pastors' schools, which in turn has been identified as a cause of declining native language literacy skills (Thomas, 1981:42; Baldauf, 1982:3).

The shift in the use of English from a LWC to a mother tongue can be seen as resulting from 1) opportunities for economic and material rewards associated with proficiency in that language; 2) opportunities for use of the language in oral domains; and 3) support of a powerful institution, the school. At the same time, weakening Samoan language skills reflect the weakening of influence of cultural institutions which have traditionally taught them and been domains for their use.

Implications for Educators

If both languages are to be retained and if both cultures are to be promoted, the public schools will be an important institution for doing so. At a time when there is evidence of a language shift occurring in American Samoa, it is argued that to preserve vernacular literacy skills for future generations, the public schools will have to assume a role traditionally assumed by another institution (the pastors' schools), namely that of teaching vernacular literacy in the domains in which the vernacular is used in the larger Samoan society. This will require not only patience and a long-term commitment to the goals of bilingualism by both educators and community members at large, but also a sustained programme of research, community education and curriculum design.

One early step would be to conduct a "sociolinguistically oriented language survey" (Ferguson, 1966) which would provide not only basic data on the languages used in various social domains (which might form the basis for curriculum reform), but also information about attitudes toward those languages. Underwood (1984) has argued that in Guam, which shares many of the features of context with American Samoa, it is not so much attitudes toward the

vernacular which need to change but rather expectations about the language of wider communication.

Another valuable line of research with important implications for education has been in the ethnography of language (Hymes, 1972; Phillips, 1972; Boggs, 1972; Heath, 1983). The modification of classroom participant structures and language use patterns has been shown to possibly affect student performance among native Hawaiians in Hawaii (Au, 1980). The groundwork for similar work in Samoa has been provided by Ochs (1982), who describes patterns of socialization and verbal development in a traditional Samoan village. Still needed are ethnographic descriptions of the effects of urbanization, universal compulsory education, and changing effects of urbanization, universal compulsory education, and changing employment patterns on the boundaries within which communication occurs, the internal structure of this communication, and the significance that this communication has for education.

Finally, valid and reliable measures of language proficiency, oral and written, need to be developed for both Samoan and English. Such measures, based on the forms and functions of language as used in the community, will not only guide policy makers and educators in their decisions on language issues, they will also contribute to a theory of language retention and language spread.

Acknowledgements

I am grateful to Salu Reid and Stan Koki for comments on earlier versions of this paper and to Salu Reid and her colleagues in the American Samoa Department of Education for allowing me the opportunity to present that earlier version at their leadership conference in Pago Pago in August of 1985.

Notes

1. Yeomen: Petty officers in the U.S. Navy or Coast Guard who perform clerical duties.

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LITERACY AMONGST THE MACHIGUENGA: A CASE STUDY

Patricia M. Davis

I. Historical Background
II. The Acceptance of Literacy
III. Trends
IV. Conclusions

I. Historical Background

The Machiguenga1 language community has been in sporadic contact with the outside world ever since the arrival of Spanish missionaries on the main rivers of Peru's southern jungle some four centuries ago. During World War I, exploitation by rubber hunters was ruthless, and, in certain areas, resulted in large-scale death and disruption. However, the Machiguenga traditionally live widely scattered in small nuclear or extended family groups; by fleeing to the headwaters of minor tributaries or otherwise remaining in isolated areas, the society, although fragmented, managed to survive.

During the past approximately eighty years, some five Spanish mission stations have become established in Machiguenga territory

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and have drawn a following from the surrounding areas. These missions have provided education in Spanish for Machiguenga children. Initially, at least, the dropout rate was high; in the late 1950s diocese authorities also expressed disappointment over the high proportion of students who reverted to the traditional way of life upon leaving school. However, second and third generation students, who now understand more Spanish, achieve better academic standing and demonstrate more acculturation. School programs at two of the Catholic mission stations presently offer educational opportunities through high school.

Apart from the missions, the majority of the Machiguenga lived in isolated family groups scattered over an area of one hundred fifty by two hundred fifty miles, were monolingual, and had little, if any, contact with the outside world.

Literacy in the Machiguenga language began on a preliminary basis under government and Summer Institute of Linguistics (SIL) auspices during the mid-1950s. During the 1960s and 1970s a network of bilingual schools was established in thirteen villages. Envisioned as a transition program, classes were first taught in the Machiguenga language by native teachers, with native language materials. Oral Spanish was taught with second-language methodology. Each year the Spanish component was increased until, by Grade 5, the students were expected to work chiefly in Spanish. In the early 1980s, in response to years of earnest pleading, the government established an agricultural/vocational high school in the area to serve both the Machiguenga and the adjacent Campa and Piro language groups. Although classes are conducted in Spanish, the school is directed and staffed by native teachers, with the addition of one Spanish-speaking teacher to teach English, as is required by the government. The goal of the school is to provide students with skills with which to provide themselves a livelihood without having to abandon the tribal area. An agricultural cooperative provides transportation of produce to market as well as some skilled jobs. The language of the high school community is Machiguenga, but Spanish is used to communicate with Piro and Campa students and Spanish-speaking visitors.

II. The Acceptance of Literacy

In contrast to certain other language groups, the Machiguenga seem to have accepted literacy as a matter of course. Once schooling

became available, and the opportunity afforded was understood, it was almost universally assumed that children would attend. New villages formed around the school as trained native teachers settled in new areas. Adults frequently attended school with the children, or requested classes of their own. As a result, a 1984 survey showed school communities of 15-25 years' standing with a high proportion of readers--in some cases as high as ninety percent among the village inhabitants of Grade 2 level and above. Literacy retention was high, even among women who had dropped out of school after three years and appeared to have little use for literacy in the home.

Generalities are risky because the Machiguenga situation varies with time, location, and groups of speakers. However, the following factors may have influenced Machiguenga attitudes towards literacy:

1. The mother tongue is still the chief means of communication for the majority of Machiguenga.

2. The group as a whole has not yet experienced sufficient pressure from the outside world to result in language rejection.

3. The Machiguenga value oral competence. Orators, singers, and story tellers are respected. Similarly, worth is attributed to the written language.

4. Literacy in the vernacular is understood to be useful: for communication, for obtaining information, for keeping records, for achieving parity with other literate individuals and groups. Many have expressed a desire to read Scripture.

5. The vernacular is the only vehicle (oral or written) employed by the church, and literacy forms an important part of the church subculture. Church sermons give opportunity for public oratory, a skill compatible with traditional oratory. Singers find opportunities to provide special music. Women are involved in leading women's Bible classes and in Sunday school teaching. Each of these responsibilities requires literacy. In addition, each person who attends services is helped to follow both the appropriate hymn in the hymnbook and the appropriate Scripture reading from the New Testament, and it is a matter of pride to be able to do so.

6. Reading and writing in the vernacular is strongly supported by the bilingual schools, vernacular-language training courses which are held in the area from time to time, and general expectations that young people will be literate.

7. By law school attendance is compulsory from the age of six years, and the Machiguenga reflect a high degree of conscientiousness in regard to keeping the laws.

8. Literacy in the vernacular is seen as a stepping-stone to literacy in Spanish, concomitant interaction with the outside world, and as a means of self-protection.

9. Most of the young-to-middle-aged adults have attended school. For them literacy has become part of the "shared resources of the society"[2], albeit on a lower level of skill than normally expected in North America.

10. The senior SIL workers and a cooperating missionary couple from the Swiss Indian Mission speak the language well, and along with junior workers have identified strongly with the Machiguenga. To a large extent a shared bond of trust and affection has been created; the native culture has been appreciated and studied; literacy materials and methods have been culturally adapted. For over twenty years literacy has been both modelled and fostered by letters, written announcements, news letters, bulletins, written instructions, record keeping, provision of books, and training of native authors. Thus rapport with the change agents and quantity and length of exposure can be considered influencing factors.

11. Domains of use have developed for vernacular literacy, even though pressure towards Spanish, the national language, is strong and all official records must be kept in Spanish. The dichotomy is somewhat as follows:

Activity	Spanish Domain	Machiguenga domain
Letter writing and invitations	Correspondence directed to Spanish speakers and all government or business offices.	Correspondence directed to Machiguenga speakers. This is a high frequency activity which produces much satisfaction and is highly valued.
Written reports	Minutes of the Machiguenga agricultural cooperative, health records, store records, minutes of official meetings.	Reports to the constituency from official meetings and conference; announcements
Documents	Birth certificates, land requests, petitions to government offices, bills.	All church minutes and records. Certain bills and receipts between Machiguenga speakers.
Creative writing	School Assignments. Letters and minutes, as above.	School assignments. Native authors are trained but find themselves too busy with other work to be very productive. Bible Institute lesson materials.
Community meetings		Conducted chiefly in the vernacular, but official records must be kept in Spanish.
Church		All activities conducted in the vernacular.
Training courses	Out of the area: Teacher training, Bible Institute, health workers, agricultural and vocational training, tertiary education.	Within the area: Teacher supervision, Bible Institute, health workers, agricultural and vocational training for both men and women (unless staff cannot speak Machiguenga.)
School	Grade 5 through high school, with some exceptions.	Grades 1 - 4, with Spanish taught as a second language.

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III. Trends

Although in the bilingual school communities the Machiguenga language is used in all domains by and between almost all speakers, pressure towards Spanish is very strong. As the present, more monolingual generation is replaced by young adults who understand and read Spanish, the need for literacy in the vernacular may not be felt as keenly, and the desire for vernacular literacy may then decrease in direct proportion to general Spanish fluency. Literacy in the vernacular would also decrease sharply should government support be withdrawn from the bilingual schools or if vernacular language materials failed to be funded. Interest will also tend to dwindle if a certain quantity of new literature in the vernacular is not forthcoming.

To maintain vernacular literacy beyond the next generation, schools and church must continue to give it importance. Continued government support for the schools, especially as regards funds for the publishing of vernacular materials, will also be a key item. Literacy retention might also be fostered by an enlarged program of native writing, publishing and distribution. Since keen interest has been expressed in the preservation of traditional songs and stories, active promotion of this interest should stimulate literacy. If the services of an ethnomusicologist could be secured, the project could benefit greatly; further development of native-style hymnody might also be stimulated. A market for native-authored books and newsletters needs to be developed, since few people are yet willing to part with hard-earned money to pay for books. Perhaps calendars printed on the Machiguenga Print Shop mimeograph would be sufficiently desired to evoke a market.

IV. Conclusions

The acceptance of literacy among the Machiguenga conforms, in essence, to the five criteria proposed by Spolsky et al.:[3]

1. Willingness by those introducing literacy to have literacy in the vernacular.

2. Perceived utility of literacy by traditionally influential members of the community.

3. The establishment of native functions for literacy.

4. The continued widespread use of the vernacular as a spoken language.

5. The support of the maintenance of vernacular literacy by a powerful educational system under local control.

In addition, the Machiguenga also display many of the characteristics enumerated by Brice Heath:[4]

1. Machiguenga frequently utilize clarifying questions to explicate matters left ambiguous by imprecise referents; they talk about language.

2. Kin and naming practices are not, and have never been, intertwined with landholding, status/ leadership distinctions or other symbolic systems which legitimatize power.

3. In addition to the school and family, opportunities for talk about written materials are provided by several institutions: the church, Bible Institute, local training courses, the agricultural cooperative, and, to a lesser extent, community meetings.

4. Community meetings and elections provide opportunity for collective sociopolitical discussion.

5. Machiguenga:

--has mechanisms for easy borrowing of vocabulary from other languages.
--has a wide range of oral narratives.
--holds wholesome but not unusually strong or weak valuations of the language.
--gives some opportunity to explicate the scope and sequence of tasks during the process of activities, although this is not a strong point in the culture.

6. Interactive exposure to the outside world is ever more frequent.

7. Thus far there has been no large-scale migration of the young people to the urban centers; it remains to be seen what will occur as a large proportion of young adults complete high school.

8. The church organization:

--has frequent meetings in which religious texts are discussed.
--has developed organizational involvement for both sexes, and across generations.
--designates considerable significance to membership rites: baptism, communion, participation in conferences.
--sponsors its own itinerant evangelists, and encourages all to share their faith.

If the combination of these factors is predictive of long-term literacy retention, the prospects for literacy amongst the Machiguenga appear to be bright for some time to come.[5]

Notes

1 Machiguenga is spoken by some 6,000 to 7,000 inhabitants of the southern jungle of Peru. The language belongs to the Arawakan language family.

2 Ferguson, Charles A. nd. Literacy in a hunting-and-gathering society: The case of the Diyari, p.2. Mimeo.

3 Spolsky, Bernard, Engelbrecht, Guillermino and Ortiz, Leroy. 1983. Religious, political and educational factors in the development of biliteracy in the Kingdom of Tonga. Journal of Multilingual and Multicultural Development 4.459-69

4 Brice Heath, Shirley. 1987. Some VERY tentative principles of literacy retention, 2-5. Mimeo.

5 I am grateful to my senior workers Dr. Wayne and Betty Snell for their reading of the manuscript and their suggestions. Errors, however, remain the responsibility of the author.

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SUBMITTING TO THE COMPUTER AGE

This is the second issue of Notes on Literacy to be edited and printed with MicroSoft Word on an MS-DOS computer and laser printer. For ease of handling any articles submitted on computer disk should be in MS-DOS format. We have the capabilities of reading both 720k 3 1/2" disks, and 1.2 megabyte or 360k 5 1/4" disks.

No formatting should be done to the text as it will all have to be changed to that which is used by NOL. This especially applies to those using the JAARS text editor, who have changes tables for special characters. Any articles written with a word processor such as Word Star should be sent without special formatting (in pure "ASCII"). A printed copy of the article should accompany the disk if possible, to indicate how the author would like the article to look, as an aid to editing.

SUGGESTIONS FOR POSTPRIMERS

Katharine Barnwell, Africa Area Translation Coordinator, in a recent article, offers four suggestions which might profitably be incorporated into later primers or postprimers:

1. A map of the local language area, with towns and villages, rivers and mountains marked. Another map could show how the language area fits into the geography of the whole country. Furthermore, a map of the whole world would show how the reader's country relates to other countries of the world.

2. A long story might be broken into sections, each section with its appropriate heading, to be read with pause and appropriate intonation.

3. Occasional footnotes with the use of an asterisk might be included for pertinent explanatory material.

4. Pertinent captions might be included under illustrations.

The introduction of the above features in a planned way would provide excellent training and preparation for the reader's encounter with them in his future reading. Barnwell's article is to appear shortly in Notes on Scripture in Use, No. 17.

How Do YOU Teach Tone?

Have you found a unique, satisfying way of teaching people to read tone in their language?

Have you found mother tongue speakers devising their own ways of describing tone so they can teach others to read it?

Have you discovered an opportune time to teach tone, e.g. before, during or after teaching letters or other suprasegmentals?

Anything at all about the teaching of tone (unique, traditional, or frustratingly difficult) that has come to your attention is of interest to the International Literacy Office. We want to collect as many ideas and experiences as possible.

Whatever you may have to tell us, long or short, detailed or nondetailed, will be of interest.

Please send your findings/successes/problems to:

International Coordinator for Literacy
Summer Institute of Linguistics
7500 W. Camp Wisdom Road
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SUMMER INSTITUTE OF LINGUISTICS
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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

Academic Book Center

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
U.S.A.

EDITOR: OLIVE A. SHELL

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Notes On Literacy

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Computer media: Contributors who have copies of their manuscripts on magnetic media such as 5.25" diskettes in PC/MS-DOS format are urged to submit the same along with their manuscript.

TRAINING INDIGENOUS EDITORS

Riena Kondo and Leah Walter

SIL, Colombia

I. Introduction
II. The First Training Course
III. The Second Training Course
IV. The Third Training Course
V. Results
VI. Future Courses

I. Introduction

There are now many indigenous writers in Colombia, some of them very creative and a few who have written fairly large books. Many short courses have helped them perfect their skills, but in the end it has usually been the linguists who do final corrections of their spelling, punctuation, diacritics, word division, etc. Who will do this after the linguists have left? Certainly not Spanish-speaking publishers who don't know the indigenous languages. Is it not SIL's responsibility to help provide for the continuing production of books in the communities where we work?

As this need began to be articulated by different people, including Guahibo writer, Marcelino Sosa, one attempt was begun to train editors in an apprenticeship-type situation. Three Guahibo young people came to the SIL Center for training. However, this kind of training is not feasible for all indigenous language groups. Gradually plans evolved for a series of three editing courses, open to all language groups. General content of the three courses was planned:

Course One: Community planning and motivation; punctuation and overall acceptability of manuscript; and correction of punctuation and paragraphing of manuscript.

Course Two: Organizing community committees and motivation of community; steps for editing and book design; and content editing.

Course Three: Community committees and their responsibilities; final proofreading and layout of book; funding and distribution;

relating to the publisher and the continued production of literature in the community--training others.

II. The First Editors' Course

1. Preparation and content

It was decided to emphasize punctuation and correction of details in the first course, and the editing of content, layout, etc. in later courses. In order to be able to teach correction of manuscripts (like proofreading, but not yet at the proofs stage) to students from different languages, several things had to be prepared ahead of time:

1) Capitalization and punctuation rules for Spanish (with examples) were included in a writers' manual which the literacy department had been working on for use in writer-training courses (Manual para escritores indígenas, pp. 30-31).[1] Also included were proofreaders' marks and examples of their use. Photocopies of this manual were made available to all the students.

2) Sample exercises in Spanish were collected for use in teaching punctuation from the chalkboard.

3) Linguists were asked to produce two exercises for use during the punctuation class, portions of text in the indigenous languages, with errors. A copy corrected with red pencil was requested, if they would not be available to help participants to correct the exercises (NOTE: Some linguists were also participating in a comparative workshop.) A chart was provided that indicated the type and number of errors for each day in the exercise. (See Excerpt I.) For example: the text for the first exercise (for Day 1) should include three times a small letter which should be a capital; two times a capital letter which should be a small letter; two times a period is omitted; three times words or letters are transposed; two times a word or letter is omitted; two times a wrong letter occurs; two times diacritics are left out. Paragraphs should be taken from previously written indigenous-authored material. The corrected paragraphs should be corrected in red, using proofreading marks.

The following subjects were included in the first course: 1) The punctuation class was cotaught by an SIL linguist and a Colombian[2] journalism student. 2) The class on 'What kind of books do we want and how do we set up a planning committee?', took the form of a discussion on the subject. It was led by a Guahibo leader and was

limited to participation by indigenous people. 3) The class on Principles of Indigenous Education, was mainly discussion, cotaught by a Colombian educator and an SIL linguist. 4) First Principles of Library Science (Excerpt III) was taught by an SIL member; 5) Psychology and Pedagogy of Indigenous Education (elective), was cotaught by two Colombian graduates in education, and 6) composition (elective) was taught by an SIL linguist. Translation and ambiguity were covered briefly (Excerpt IV).

The three Colombian educators and Guahibo, Marcelino Sosa, represent the foundation FRESCI (Foundation for the Respect for and Solidarity with the Indigenous People of Colombia), which also took the initiative in obtaining credits for the course from the state educational authorities.

2. The course

Forty students representing thirteen languages attended the three-week course held in January 1987. Most, not all, were at least fifth-grade graduates, thirteen were bilingual school teachers. Only three groups already had educational committees. Some were still struggling with the meaning of the word 'committee'.

In their **discussion class** the students talked about their ideas for bilingual-bicultural education, how to achieve their ideals through preparing school materials themselves (in their mother tongue), how to organize a committee, to coordinate such activities, etc. They shared their problems and hopes, and encouraged one another.

In the **indigenous education class** the students tried to list some of their cultural values (surface or material, and deep culture) and discussed which are important to preserve. They attempted to plan a curriculum for Grades 1-5 that would help preserve these values. The guidance and time allowed for this was not sufficient for significant innovation, but it started the participants thinking. They saw the film 'Between Two Worlds' several times and discussed certain parts of it in class.

During the **editing class**, the teacher introduced what was to be taught (see chart, Excerpt I), discussed the rules in Spanish, and corrected a Spanish text written on the chalkboard. After this practice, each student corrected exercises (prepared by the linguist) in his own language and checked his results with the corrected copy.

Some had a second exercise for homework, to hand in the next day. They worked with linguists if they had difficulty with the exercise.

In the **library science class**, each language group made a small library of the books available in their language, and it was noted that one group, as soon as they mimeographed a book in their **composition class**,[3] promptly put it into their library. Book care was stressed, and three local libraries were visited. The idea of creating private, school and village libraries was, of course, to create a place where the books they produce will be preserved and used, hopefully for a long time. A few school teachers reported that they had already started school libraries.

There were so many new concepts presented in the classes that some complained that their heads couldn't hold it all. They asked that they receive notes from the course, and this had already been anticipated. A Colombian took notes in four classes on a small computer, and a printout was photocopied to hand out at the end of the course.

3. The follow-up: home exercises

It had been planned to hold three courses about six months apart. However it turned out that the schoolteachers would be free only once a year. Since a lot of interest had been created, and in order not to let it die, it was decided, along with the students, to carry out a type of correspondence course. The students would be sent exercises to correct and a short writing assignment to return, after which they would receive more exercises. No strict time schedule was set since many live in isolated areas where communication is difficult and slow. In addition, they were assigned the task of producing a school book in rough draft to bring to the next course for editing. It was not required that they write it themselves, though many planned to. Suggestions for this assignment were: a supplementary science book, a history of their people, a collection of myths, or a book of stories for second-grade reading. The writers' manual they received has ideas for these, such as questions to ask the older people about history, examples of stories for children, lists of possible topics, etc.

Individuals from these or other language groups who had not participated in the first course were to be permitted to come to the second course only after participating in the correspondence courses and the writing assignment. There were a number of candidates.

4. Evaluation of the course

There were definitely things that could have been done better. Much was learned from this first attempt.

The **editing class** would have been better if there had been more linguist participation. It was not ideal to have students correct their own exercises from a corrected copy. Individual progress and the repeated missing of a certain type of error could not be monitored. It was felt that the students learned the rules but needed much more practice in catching mistakes, not overlooking them.

There was less editing and more on bilingual education (pedagogy, etc.) than originally planned. This happened when we invited the participation of the Foundation FRESCI, since bilingual education is their area of competence. However, it turned out to be good background and stimulation for the editors, especially the two discussion classes where there was an exchange of ideas among the different groups. The more advanced groups (in the area of participation in the planning of their own education and literature) were an encouragement to those who hadn't tried anything along those lines before.

Because of a misunderstanding, the **composition class** members printed their stories instead of spending more time editing them. It was nice to have books for participants to take home, but it showed up some flaws in the preliminary planning sessions.

The **library science class** was probably too short (only nine hours of class). It was requested that the next course have more about libraries; libraries were discussed in this course as time allowed, though not in great detail.

There was some confusion caused by the way the **electives** were offered. Most of the students did not understand electives and wanted to take all of the classes.

Of course the positive results far outweigh the faults. In some groups there was a tremendous enthusiasm generated for producing their own schoolbooks--a bright awakening to this new possibility. The students of one language group requested a writers' workshop midyear to produce schoolbooks.

A few students confided, 'I'm not sure I'd make a good editor. May I select someone else from my area who might be better to come to the next course?' This showed their concern that their group have good editors, because for them it would be a sacrifice to give up coming themselves. They all wanted to see one another again.

Several groups planned to try to interest their communities in starting an education committee. The idea is something quite foreign to the face-to-face indigenous cultures and will be accepted only gradually as it is understood. One student wrote to Marcelino Sosa in April, 'After arriving from there I tried to get the people together, in my way, to explain what we talked about and orient them and cause them to recognize the value of our culture and what in the future could be the road by way of education for the indigenous children. We are writing and will select the best. Trying to explain things to the people I sometimes end up in the air, because I'm just getting started in this job. The people are very enthused, in the way of the people here.'

The experiences obtained by the FRESCI members in interacting with the students in the editing course have helped give a good foundation for planning their own courses. The members of FRESCI are all Colombians, both indigenous and nonindigenous.

III. The Second Editors' Course

The second course was held a year later, in January 1988. Most (not all) of the students brought a manuscript they had written or someone else had helped write. The idea of having a correspondence course between courses was a failure, probably because communication in isolated areas is so difficult. But many students returned. There were forty-two participants from fourteen languages; most of these were returning for the second time.

In the second course there was an emphasis on the steps of **editing and designing a book** (Excerpt II). The information was mimeographed and handed out as pages to be glued into the participants' notebooks. It included the following topics: responsibilities of an editor, evaluation of the general content of a book, evaluation of the message, organization of the book, correction of details, format, final corrections, layout, information for the print shop, distribution.

As the steps were explained, the students were expected to apply them to the manuscripts they were editing in their languages each afternoon, under the supervision of the respective linguists. It wasn't possible for those with long manuscripts to get through all the processes during the course, however.

To help with the editing of content, a class in **literary criticism** (Excerpt V) was taught, also with material to paste into their notebooks. It included suggestions for judging a product from the following points of view: correct, clear and interesting; action and dialogue; details; the use of the familiar; suspense; plot; setting; characters; emotional words; onomatopoetic words. (In the third course two more were added: verisimilitude and point of view of the narrator of the story). These were short classes, each stressing just one topic. They so captured the imagination of a Camsá student that he was asked to teach the material in the third course. He did very well and the class was popular.

The class on **punctuation** and editing of details was taught again; it was felt that the students could never get too much practice with this. At the end of the series of courses, all the students felt that this had been a very important class. During this second course there was some teaching of grammar rules for the use of comma in the national language, Spanish, as well as phonological rules for comma, semicolon and period, such as length of pause and lowering the voice. As anticipated, this was not an easy subject for the students. The linguists were expected to follow up on this, showing how it applied in each individual language.

The **discussion class** in which only indigenous people participated was again the first class of the day. The students again talked about how to organize their community for the production, publication and distribution of books.

Evaluation: The greater participation of the linguists in this course was a tremendous advantage. They worked with the students on their punctuation exercises during the morning class and then all afternoon with them on the books they were editing. Two Colombians (nonindigenous) taught classes, along with SIL linguists.

The assignment for the third course was to check their first manuscript (or provisional edition) in their community and write (or get others to write) a new manuscript to edit during the third course.

IV. The Third Editors' Course

1. Preparation

The third editors' course was held in January 1989. In preparation for this course, an editors' manual was produced, which contained 107 pages of material from previous courses and material to be taught in the third course. A provisional edition was photocopied for the students. (This was in addition to their writers' manual, '*Manual de escritores indígenas*', which they were also expected to bring.)[4]

Some thinking was done about how the editors would use their new skills, especially in the groups which still have no organization for publishing books (the majority). It was decided that they might teach writers' courses in their villages and print small editions of their books on the silk-screen mimeograph, possibly for school libraries, where these exist. For that reason, we included classes on how to teach writing courses (Excerpt VI) and how to use the silk-screen press; some students had not learned these skills in the first course. The students who have access to a regular mimeograph machine in their location also practised with one of these.

2. The course

There were thirty-five participants from twelve languages. As we had planned from the beginning, in order to teach how to get a manuscript to press, we invited to this course guest speakers from Bogotá, Colombia's capital, who had experience in editing and publishing. Just before their arrival, a class was taught regarding the costs involved in publishing (and how to raise funds). The guest speakers were able to add more concrete figures and answer questions in this area, besides giving other helpful suggestions. Their contribution was very valuable. As a bonus, we also had an adviser from the Ministry of Education, author of a primer based on Scripture, who explained the newest educational legislation and also how she developed her primer.

Another difference about the third course was that we were short on SIL teaching personnel, and we therefore called on a number of students to participate in the teaching, besides the Camsá who taught literary criticism and two classes in translation (a bare introduction). Students from different groups shared their experiences regarding

distribution, teaching writers' courses, and writing activities for school textbooks.

The **punctuation class** (Excerpt II) was taught again, with more time than in previous courses for the students to work on their own languages with the linguists.

The **discussion class** among the students was led by a different participant each week, each with a different emphasis: literature distribution, community organization, and training writers. These discussion classes in the three courses were like planning sessions. Each year the questions were more specific. The experiences of those from peasant-type societies, which had already had several generations of experience with organizations, were a help to those from tribal societies who found the ideas very new and not easy to apply when they returned home.

Some time during the last week was spent sharing plans. All of the participants explained the work they had in progress and where they expected to go from there. The students paid close attention to these discussions, receiving ideas for types of books to work on. A number were working (either together or separately) on school textbooks (readers, science books, geography, history, etc.). At least one was working on a preprimer and one on a basic primer. Several were working on books of stories and/or myths. An editorial committee has been set up by at least one group that didn't have one before, and this committee has conducted at least one writers' workshop. Many reported a growing interest in vernacular literature in their communities, but most felt that the people do not have a reading habit. To sell them on reading their books (except in school), they will need to produce better and better books (as to content and appearance). Some have made good contacts with educational entities in their areas. Others are still very dependent on their contact with SIL to help them with publishing. All talked about how the community might be able to help in the financing of publication, but few have put their suggestions into practice.

3. Evaluation

During the course there was some review of book layout and design, but probably not enough. We shouldn't have assumed that the students remembered everything from the previous course or that they would refer to their editors' manual. There was not adequate information given on how to teach a writers' course. However, the information is available in the writers' manual. Participants have been encouraged to hold a writers course in their community, and can seek help in organizing, if necessary.

The silk-screen printing of books produced took more time than planned. Two things contributed to this: 1) The Colombian organizing the printing did not have adequate training and experience, and 2) the books printed were too lengthy (some fifty pages). We needed to have someone (SIL) step in and help out during the printing of the books.

All of the students learned the principles of editing. What they now need is a great deal of practice. Some are receiving practice as they help with translation checking, others as they edit schoolbooks for their committees or along with the linguists. Three of the Guahibo editing students, in addition to the series of courses, participated in a fifteen-month editing apprenticeship at the SIL Center. During their apprenticeship they edit school textbooks and library books produced by their bilingual education committee.

The Páez and Camsá participants have set up editing committees and are editing books to be used in schools in their areas. The Camsá committee is now publishing the material it produces.

The students learned technical and creative skills, but perhaps even more important, they grew in vision as they exchanged ideas among themselves and confronted the issues of planning for literature development in their respective languages. One bilingual teacher confessed that one of the insights that came to him was that his students are not just for 'destroying and changing into something new', but rather, valuable human beings to be stimulated and encouraged to fulfill their potential.

V. Results

The long-range results are not yet known, but an interest (in some cases, a hope) has been awakened; the possibilities have been

demonstrated; some groups are beginning to develop infrastructures, and some individuals have learned skills that will ensure a supply of editors, as well as writers, when SIL has departed.

The Páez committee has gotten together in their Reservation several times to edit First and Second Grade textbooks to be funded through SIL, and, in some cases, to be mimeographed on their own machines with funds obtained through local government connections. A Guahibo young lady was hired for three months by a government educational entity to help a Guahibo staff member edit some materials in Guahibo for the First Grade course. After she finished a fifteen-month editing apprenticeship, working on books in her language with two other Guahibos and an SIL linguist, she obtained a scholarship to continue her secondary education. She continues to write in her spare time.

Two Guahibo editors in villages isolated from each other are each taking home a typewriter and flat silk screen mimeograph. They plan to teach writers' courses and then edit and mimeograph limited editions of storybooks produced, for school libraries in their general area. They produced books in the same way for the editors' courses.

An outstanding Bora school teacher is from a very small minority group of Bora in Colombia. He teaches in a boarding school where at least four indigenous languages are spoken and the teaching has been in Spanish. After writing about education for leaders of his community, he brought to the third course a primer he had written for teaching Bora children to read their own language.

Each course more students participated in the teaching. In response to popular demand, another series of courses is planned for many who haven't yet participated. Those with experience will gradually take over the teaching, using the 'editors' manual' developed during the first course. Through these courses, the groundwork is being laid for an ongoing indigenous literacy program.

VI. Future Courses

It has been decided to hold future courses at two-year intervals. Following is a tentative schedule:

Editors' Course I (Jan. 10-31, 1990)
- Discussion class on organization for writing, editing, printing, distributing and evaluation literature - 14 hours.

- Literary criticism - 7 hours.
- Basis for practical orthography - 7 hours.
- Punctuation and correction of manuscripts - 14 hours.
- Editing of content and details - 9 hours.
- How to teach a writers' course - 5 hours.
- Preparation of stencils and how to mimeograph - 9 hours.
- Funding of publication - 5 hours.
- Typing (if there are enough typewriters) - 14 hours.
- Writing practice with punctuation - 7 hours.
- Mimeographing -6 hours.
- Distribution and libraries (including a field trip or two) - 8 hours.
- Art - 4 hours

Editors' Course II (Jan. 1991)
(Must bring a manuscript of a small book, written and edited.)
- Discussion class (organization) - 14 hours.
- Literary criticism - 7 hours.
- Formation of practical orthographies (phonological aspects) - 7 hours.
- Punctuation and correction of manuscripts - 14 hours.
- Layout and design - 5 hours.
- Distribution and evaluation - 4 hours.
- Preparing textbooks with activities - 5 hours.
- Publishing (not mimeo) - 4 hours.
- Culture - 10 hours.
- Editing and layout practice - 35 hours.
- Extras on Saturdays, not yet planned.

Notes:

[1]Excerpts from the Manual follow this article.

[2]From here on, when 'Colombian' is used in reference to a person (or persons), it means a Spanish speaking, nonindigenous person.

[3]The composition class is not described here, since 'writers' courses' have been described elsewhere.

[4]The following books are available in Spanish:

Manual de editores indígenas (Manual for indigenous editors), SIL, Colombia,

Manual de escritores indígenas (Manual for indigenous writers), SIL, Colombia.

EXCERPTS FROM THE MANUAL FOR INDIGENOUS EDITORS

(translated from Spanish)

Riena Kondo and Leah Walter

SIL, Colombia

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II. The Editor and his Responsibilities 15

III. Libraries 26

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VI. How to Teach a Writers' Course 41

EXCERPT I: Chart 1

This chart was used by the linguists, in preparing exercises for each day of the editing class.

day 14	day 13	day 12	day 11	day 10	day 9	day 8	day 7	day 6	day 5	day 4	day 3	day 2	day 1	
	1			1				1			1	1	3	small letter which should be a capital (proper name beginning of sentence)
			1				1				1	1	2	capital which should be a small letter (i.e. in titles)
	1				1				1			1	2	period omitted
				1				1			1	1	3	need to transpose words or letters
				1				1			1	1	2	a word or letter left out
		1				1				1	1	1	2	a wrong letter
				1			1				1	1	2	diacritic left out
		1			1				1		1	2		a letter or word to delete
			1			1				1	1	2		space which should not be there
	1			1				1			1	2		2 words run together need a space
		1			1				1		1	1		comma left out after vocative
		1			1				1		1	1		hyphen needed (i.e. at end of line)
			1			1		1		1	1			paragraph indentation needed (1st line of text or in dialogue for each speaker)
			1				1			1	1			wrong indentation or uneven left margin
		1			1		1			1	1			¿? left out
	X		X			X		X	X	X				: — dialogue without punctuation & paragraph indentation (or partly)
			1				1		1					¡! left out where need is obvious: ¡Look out!
	1			1			1		1					: colon and commas left out of series of items
		X	X			X	X							" " a quote that needs quotation marks (He thought:, or a cited reference)
				X	X									—" " a quote that needs quotation marks within a dialogue (she said he said)

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EXCERPT II: The editor and his responsibilities

1. CHARACTERISTICS OF A GOOD EDITOR (who also revises and corrects)

The good editor is organized, mindful of details and a perfectionist.

The good editor is organized in his work. He always has the pages he is editing in order, the pictures numbered and kept in order, and his archives in order. He knows where all his papers are all the time, in order to be able to find them easily. Also he knows at what stage each project is and what is lacking for finishing it; if it is necessary to do so, he has a place in which to enter the progress on each book that he is editing. A good editor does not scatter his papers, for he is organized.

The good editor pays attention to details. To him the smallest details are important, such as when to condense a paragraph, when to use double space, or subtitles, or explanations under the illustrations, which kind of type to use, etc. It is relatively easy to write a book, but to publish a book requires many processes and many decisions regarding small details. These facts do not bother the good editor, for he is one who concentrates on details.

The good editor is such a perfectionist that it bothers him to ignore a single error; he is an indefatigable hunter of errors in order to eliminate them all. He knows that a single error in an edition of a thousand books is produced a thousand times (a thousand errors), also he knows that the readers are going to complain if they find a single error in a book. The good editor is also a perfectionist in other things, for he wants his book to be interesting on the inside and beautiful on the outside. Therefore the color of the dust jacket, the quality of the illustrations and the appearance of the pages are all important to him. He does not want the book to appear difficult to read or boring, but to be irresistible. Thus the good editor is a perfectionist.

Remember: the good editor is organized, mindful of details and a perfectionist. He has great patience in correcting the work of imperfect human writers, but he does not have patience with his own errors. They are his enemies.

2. REVISING AND EDITING A MANUSCRIPT

Responsibilities of the editor:

The editor acts as the evaluator of the literature. He is responsible to four persons and entities, the responsibilities being different in each case.

1) Responsibility to the author: he must be sure that that which is written expresses clearly what the author has in mind and wishes to express, but without destroying the style of the author and without offending him.

2) Responsibility to the organization responsible for the publication: he must be sure that the book fulfills the technical requirements and the purposes of the organization responsible for the publication.

3) Responsibility to the printing shop: he must be sure that the book is written in legible form as to format, spelling of the words, punctuation, arrangement of the illustrations, etc.

4) Responsibility to the reader: he must be sure that the message of the book is clear and appropriate and interesting to the reader. (Think of the age, the sex and the environment of the readers for whom the book is written.)

3. FIRST STAGE OF THE CHECK

GENERAL EVALUATION OF THE CONTENTS OF THE BOOK

If there is not yet an editorial committee in your community, the book ought to be evaluated by at least two people. As editor, you must:

1) Read all the manuscript in order to understand the message/content.

2) Ask yourself: Does the manuscript fulfill the purpose of the author and of the organization which is going to publish it?

3) Think about the readers who are going to read this book (their age, their sex and their environment). Think of some specific person among the group. If you were that person, would you understand the message of the book?

4) If you were this reader, would you be interested in the book?

5) If to some of these questions you must answer negatively, explain to the author why you answer so and give him suggestions as to how he could improve his writing in order to rectify the problems. (Do this, taking his culture into consideration.)

4. SECOND STAGE OF THE CHECK

EVALUATION OF THE MESSAGE (the ideas) of the manuscript, and its presentation

1) Is it understandable?
   Ask yourself: Is what the author says clear, or does it need more explanation, more information? Make your suggestions to the author.

2) Is it expressed with known words?
   Are the words clear and easy to understand? Make suggestions to the author.

3) Is it not ambiguous?
   Is there ambiguity in the words (that is, words which could have more than one meaning) and one cannot know the meaning of what is written? Make suggestions to rectify this.

4) Is it clear?
   Must you read part of it two times because you did not understand it the first time? How could it be made clearer (by changing a word, changing the order of the words, etc.)?

5) Is it not confused?
   Is the thread of the story clear or is it confused with unnecessary details? The order of the presentation of the information is confusing or easy to follow? Make suggestions to the author.

6) Do you have correct information?
   Is what the author says correct and true? Does the information contain errors and doubtful information?

7) Is it interesting?
   Is the theme of the story interesting?

8) Is it easy to read?
Is the writing smooth-flowing, that is, is it pleasant and easy to read it? Make suggestions to the author. (When the reading 'flows' well, the reader does not think of the author nor the book; he is completely absorbed with what he is reading).

9) Does it have adequate details?
Does it have sufficient details (or dialogue) in order to be interesting?

Note: It may be necessary that the author rewrite his book in order that the ideas be clear or so that it will be more interesting and more appropriate for children (or adults).

After the editor makes his suggestions to the author, the latter should make corrections and write a clean copy of his material.

5. ORGANIZATION OF THE BOOK

A. Plan first and finish each part on time, using the list on the following pages.

1) Decide on the number of pages and/or lessons if there are any, and their objectives.

2) Choose the order of the stories, chapters, units (begin with something interesting).

3) Give interesting titles to the stories, chapters or units.

4) Plan the questions and activities for the lessons, if there are any, thinking of the time that it will take to finish each lesson or unit.

5) Choose a title for the book and make the title page.

6) Begin the acknowledgement page (to be finished later).

7) Plan the introductions (personal introduction, preface, etc.)

8) Plan the content page (at the first of the book) or index (at the end) with all the titles that the content will have (without yet putting the numbers of the pages).

9) Plan the general layout of the title page (title, illustration), or you could do that later.

10) Decide if it will need a translation to Spanish. In what place in the book?

11) Plan the final pages, and their order. Do you want to include: appendices? glossary? bibliography? notes? index? bibliographical note about the author?

12) Decide if subtitles are needed.

13) Make sure that you have all the names of the authors. Where: at the first of the writing? at the end? on the acknowledgement page?

14) Number all the pages and put them in order for the typist.

15) Decide if some illustrations, maps or diagrams will need title, legend or explanation under them.

B. This list will help you to verify if everything necessary for the organization of the book has been included:

Name of the book _____

	planned	begun	finished
1. units and objectives			
2. order of stories, etc.			
3. questions, activities			
4. title page			
5. acknowledgement page			
6. introductions			
7. index or contents			
8. title page			
9. translation into Spanish			
10. appendices			
11. glossary			
12. bibliography			
13. notes			
14. bibliographical note			
15. titles and subtitles			
16. names of authors			
17. numbers on the pages			
18. illustrations, maps			
19. titles of the illustrations			
20. spaces for the illustrations			

6. THIRD STAGE OF THE CHECK

CORRECTION OF DETAILS

A. This is done line by line. It is a process that is repeated several times after you have a clean copy, hopefully by several people. You can use the list for Correction of Details on the next page in order to indicate each time that you finish reading the manuscript, with attention to certain details enumerated in the list.

1) Alphabet: Decide what letters you are going to use in the alphabet and make sure that you always write the same, without changing the letter that you use for each sound.

2) Misspelling and mechanical errors: If diacritics are important in your language and are easily forgotten, include them in the list of Correction of Details.

3) Spaces between words, but not between the parts of words, including prefixes and suffixes joined to the stem.

4) Capital letters at the first of independent sentences.

5) 'Final' punctuation (. ? ; !).

6) Punctuation of subordinate (dependent) clauses (,).

7) Punctuation of dialogue (with colon and dash).

8) Punctuation of citations (with commas).

9) Paragraphs (indent).

10) Capital letters at the first of names of persons and places (proper nouns).

11) Correct use of hyphens in the division of words.

12) Punctuation with comma for other short pauses (vocatives, appositions, etc.).

13) Other punctuation (of a series, suspense, etc.).

14) Title(s) and subtitles of equal importance should conserve the same form (capital letter? boldface? underlined? centered?).

15) Number of units and the place of them on the page.

NOTE: Also it is necessary to correct the Spanish (title page, acknowledgement page, introductions, translations).

B. This list will help you to verify if you have corrected all the errors in the details.

Name of the book_____

	1	2	3	4	finished
1. orthography					
2. spelling					
3. diacritics					
4. spaces between words					
5. capital letters					
6. final punctuation (. / ; !)					
7. subordinate clauses					
8. punctuation of dialogue					
9. punctuation of citations (“ ”)					
10. paragraphs (indentation)					
11. division of words (hyphens)					
12. short pauses (,) vocatives, apposition					
13. persons, places--capital letters					
14. titles, equal treatment					
15. numbers of units (in order)					
16. corrected translation					
17. other Spanish corrected					
18. interlinear writing correct					
19. margins correct					

7. THE FORMAT

When the book has almost no errors, plan and format:

1) Decide the size of the book (width and length).

2) Decide the size of the letters and calculate the length of the lines (in centimeters or inches or letters and spaces, leaving sufficient margins (according to the kind of binding).

3) Decide what the interlinear space should be and where the text should have extra spaces between lines (considering the typewriters at your disposal).

4) Decide if the right margin should be justified.

5) If it is important that certain text and illustrations appear complete on the page, make sure that they will fit on the page. If the page isn't big enough, decide how to make the necessary adjustments. (This is chiefly for the first literacy primer.)

6) Put numbers on the pictures (and maps, diagrams, etc.) and indicate their places in the text (or wait until the layout of the book is in process).

7) Write a clean copy with the interlinear spacing and the line length indicated.

8. FOURTH STAGE OF THE CHECK

REVISIONS AND FINAL CORRECTIONS

1) For the division of words at the end of the line (with hyphen), make sure that the words are divided correctly.

2) Check the title page:
   a) The title of the book in the native language.
   b) Translation of the title into Spanish (if there is any).
   c) Name of the language.
   d) Date of the publication (or on the acknowledgement page).
   e) Name of the publisher, place of publication.

3) Check the acknowledgement page, in cooperation with the organization responsible for the publication:
   a) Names of: author(s)
      editors(s)
      translator(s) into Spanish
      typists
      illustrator(s)
      consultant(s)

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etc.

b) Recognition of funding
c) Ownership rights / ISBN* Number
d) Number of the edition
e) Number of copies
f) Name and address of the print shop.

4) Check the general layout of the cover (title, illustration, author).

5) Check the prologue, indices, appendices, activities, etc., one by one.

6) Put the numbers of the pages in the page of contents (or index) and make sure that the numbers of the pages in the index or content still correspond with the numbers of the pages in the text. If you still don't know the pages of the text, wait until you finish the layout in order to make the comparison.

7) Make sure that the titles in the contents (or index) still correspond with the titles of the text.

8) See that sufficient space is left for each picture (and its title, if there is any).

9) See that the spacing between lines and the margins is correct.

10) Obtain a clean copy, if it is necessary. Each time that there are corrections in the book (made by the typist or the computer operator) read the proofs again, paying attention to the format and the details. A part of the process is the comparison of the new version with the previous one, to make sure that the corrections are made well.

NOTE: One way for making the final spelling check is to read the book backwards, word by word. (Of course, with this system one can overlook a wrong correction which forms a well-spelled word which is not the correct word, but such errors will have been detected in the earlier readings of the text.)

9. EVALUATION OF THE MANUSCRIPT

(before the layout)

Name of the book:_____ Date:_____

Committee or person responsible: _____

1) What is the purpose of this book?

2) For whom is the book prepared? (adults? children? semiliterates? literates?)

3) The book has been tested with some of these persons?
With whom? Who tested it?

4) Were all the pictures accepted by some representative of the community?

5) Has the text of the book been corrected (as to grammar, vocabulary, dialect, spelling, punctuation, etc.)?

6) Has all the Spanish been corrected? By whom?

7) Have the designs of the cover, the title page, the acknowledgement page, the introduction, the contents or index all been checked?

8) Is a translation into Spanish, or a vocabulary or a glossary included?

9) Is there an explanation of the book in Spanish (or the translation of the title)?

10) Has the title page included the title of the book, the author, the language, the publisher, the place, the date (year)?

11) Does the acknowledgement page include the authors (if there are several); the editor, reviser or consultant; the translator; the corrector of the Spanish; the name of the organization which helped with finances; rights reserved; the number of ISBN; the number of the edition (first, second, etc.); the number of copies of this edition; the name and address of the print shop?

12) In the first pages are there all the explanations needed by the author and/or the publisher (introduction, preface, prologue, instructions for the bilingual teacher, etc.)?

13) Is all the information necessary included in the last pages (appendices, notes, bibliography, glossary, alphabetic index, biography of the author, etc.)?

14) Is the cover showy? (Do the title, the design and the color 'invite' readers to read the book?)

NOTE: This evaluation is not to oblige you to include certain things, but rather to remind you not to forget the things that you wish to include.

10. THE LAYOUT OF THE BOOK

Sometimes the process is done in the print shop or with a computer.

1) Make sure that the texts with their respective pictures are in the order in which they will appear in the book.

2) Calculate the space which the illustrations will need (with their titles, legends or explanations, if there are such).

3) Decide which pages will be blank (or which pages should be at the right).

4) Then make a 'dummy'. Arrange all the pages of the text with the illustrations on clean pages. Be sure that the text and pictures do not go over the margin.

5) When all is well organized, write in the numbers of the pages. Do not forget a number for the pages of the text which are blank. Be sure that the pages correspond with those of the index or table of contents.

6) Count the total number of pages there are in the book, not forgetting the title page, the acknowledgements, the appendices (if any), the pages which come before the text, the page(s) of the index or table of contents, and all the pages that remain blank because of the design of the book.

7) Make a plan for the printing of the book (order of pages). The plan will depend on the form chosen for binding the book. (Sometimes this is done at the print shop. In the printing, the pages with odd numbers (1, 3, 5, 7, 9) always appear on the right and the equal numbers (2, 4, 6, 8, 10) on the left.

11. INFORMATION FOR THE PRINT SHOP

1) Make a final plan of the cover and the back, with the title of the book and illustration (name of the author? translation of the title into Spanish?) choice of color of the cover and the size and style of the letters for the title.

2) Basic information:
   a) Number of copies which are desired
   b) Size desired (width and length of the book)
   c) Kind of paper desired
   d) Kind of cover page desired (color, kind of paper)
   e) Binding desired: stapled, sewn, glued, etc. (It is important to keep the climate in mind. In very humid areas staples rust.)

3) Send to the print shop:
   a) -the order sheet,
   b) -the text: the layout and the dummy,
   c) -the illustrations,
   d) -the cover plan.

12. DISTRIBUTION OF THE BOOK

1. Calculate the cost of the book. (Are you going to try to regain the cost in the price of the book?)

2. Calculate the cost of transportation. (How will it be paid?)

3. Decide who is going to distribute the book. Where? When? How?

4. Decide where you are going to store the copies meanwhile.

5. Organize the accounts and inventories.

EXCERPT III: Libraries

There are different methods for setting up and taking care of libraries. The libraries might be personal, of the community, of the church or of the school. The most important is that someone be responsible for taking care of the books, in order that they not be damaged or lost.

When there is a library, more persons can read the same book. If the books are cared for well, they will serve also for the next generation (for the very small children, when they are bigger). Libraries serve to stimulate writers, for they know that their books will not be thrown away.

Two ways of organizing and taking care of a library are presented here. Perhaps you can choose ideas from both.

1. THE LIBRARY AND ITS ORGANIZATION

A. The community library

There are various objectives in setting up a community library:

1) To promote interest for the reader and the habit of reading.
2) To encourage individual betterment.
3) To encourage betterment of the community.

Needed are: funds for buying books, a place, a little furniture (shelves, chair, table, etc.) and someone to take care of the library.

You can indicate the owner of the books by stamping on them, for example, the name of the school or of the town council, or you might have a stamp made for the library, with adhesive on it or with an embossing stamp which leaves a print without tearing. You can mark the book on the first page, or on some page within the book; it is easier to lose the first page than to lose a page within the book.

B. What are the enemies of books?

1) All kinds of insects. You can prepare for their attacks by fumigating and putting the books in plastic bags. You can make poison for the cockroaches and keep it on a shelf behind the books (a teaspoon of boric acid from the pharmacy, mixed with a teaspoon of sugar and a little water, put in the tops of pop bottles).

2) Small children soil books, eat them, tear them, draw lines on them, etc. The books that are not appropriate for small children should be kept out of their reach. Also, children can be taught, or can be punished at the first offence. It is possible to have other books that are suitable for small children, of plastic or of thick cardboard, with pictures fastened to them.

3) Water, humidity and the rain all destroy books. When you travel, wrap books well; in the house, take care of them well.

4) Dust and all kinds of dirt destroy books. Do not handle them with dirty hands; teach the people to always wash their hands before using the books. You should dust the books constantly, and not leave them on the floor or on the ground.

5) Animals (rats, cows, etc.) are enemies of books.

6) The fire is an enemy of books.

C. Classification of the books in a library:

A. Anthropology	N. Associations
B. Biography	O. Occupation
C. Science	P. Political Science
D. Family and marriage	Q. Essays
E. Education	R. Religion
F. Fiction (novels)	S. Health
G. Geography	T. Technology
H. History	U. Literature
I. Language	V. Visuals
J. Youth	W. Animals
K. Readings	X. Agriculture
L. Laws (rights)	Y. References
M. Music	Z. Prerecorded tapes

Examples: If I have a book about rural technology, I classify it under T1 (the 1 signifies that it is the first book on this material). If I have another book of technology, it will be T2, for it is the second book on this theme.

This classification is written on a paper pocket which is fastened to the back cover of the book. You ought to keep an up-to-date list of all the books that there are in the library.

D. How to organize the small library

1) It is important to display all the books. If the books are not in sight nobody will be interested in reading them.

2) It is necessary to lend the books, so that others can benefit from them.

3) It is necessary to have a special place to keep the books: a box of cardboard or wood, or a table, or a special room.

4) You can impose a fine on persons who damage the books, also on persons who return them late.

5) You should prepare the books for lending again (put the cards within the books, correct any damages that have occurred, etc.

6) In order to obtain more books, you can write other books that are needed, or buy what you want to in another language and what seems important.

7) When you have new books, you can classify them according to the list.

8) You can prepare a card for each book, writing on it the classification of the book, the title of the book, and the name of the author. Each book should have its card in a paper pocket which is glued to the inside of the back cover.

In the libraries which have many books, an alphabetical classification is made by title, author and theme and the information is kept in a file.

For the circulation of the books, the person borrowing the book chooses the book, fills in the card with his complete name and the date, gives it to the librarian who signifies the date on which the book should be returned. If the person has not finished reading the book in the time stipulated, he can renew the loan.

How can one encourage the people to read and to establish libraries? By having the books belong to the community and available to everyone.

2. THE SCHOOL LIBRARY

There are libraries where the books are not loaned but read only in the library. Many school libraries are like that. A local committee sends the following letter to the bilingual teachers of the area:

Bilingual teacher:

If you wish, the Bilingual Education Committee will send you from time to time books in our language for the school library. In this way the children will have books to read. It is important that they take care of these books, for it costs a great deal to print them. Also, when the copies are exhausted, we do not know if there will be more.

If there is no library, you can make one very quickly. Prepare a wooden box with a door. We know that books have enemies; some of them are: pigs, cows, termites, cockroaches, certain wasps, rain, very small children, persons with dirty hands, etc.

In order that the books be not quickly damaged, put plastic covers on them. If you use plastic covers the front of the book will be visible, so that the children can easily find the book they are looking for. Also the books will be more attractive to the children if they can see the colors.

When a book begins to be damaged, it is better to repair it right away. If a page becomes loose, sew it with thread or glue it in place. Do not be careless with it, for if it falls it will be lost.

We ought to appreciate books written in our languages, because they are not available everywhere as books in Spanish are.

Teach the children these rules:

1. You should wash your hands before touching a book, for it is not possible to wash the book if it becomes dirty.

2. You shouldn't tear the pages. Therefore, if several children want to read the same book, only one ought to turn the pages and ought to do it carefully.

3. When you return a book to the library, you ought to place it in the same place where it was and leave it in the same position, that is, with the back facing outwards.

4. You shouldn't fold the pages, for where it is folded is where it will begin to tear. You shouldn't push the pages with your finger, for that is the way they are wrinkled. You ought to take the corner of the page carefully in order to turn it.

5. When you finish reading a book, you should return it as soon as possible to the library, for perhaps someone else would like to use it.

6. You shouldn't take books out of the school, so as not to lose them. You should read them in school.

7. You shouldn't let very little children touch the books, for they do not yet understand and may damage them.

8. You ought to take good care of the books, for the books of a library serve for many people, if they are well taken care of.

If the adults want to read the books in the school, whether in the afternoons or in the evenings, teach them the same rules.

It is good to write the name of the school in each book of the library. It is preferable to write it on the title page, and not on the cover, so that the cover will remain clean.

If you are transferred to another school in order to teach there, you should not take the library, for it belongs to the community and not to the teacher.

EXCERPT IV: Translation

The best books and school texts are written in the local language and are based on the local culture. A textbook translated from another language is almost never of the same value or popularity, especially if the culture is quite different. But at times it is desirable or necessary to translate a book or some material from another language, for example Spanish. The Bible is one book that has been translated into more languages than any other book.

Perhaps someone will ask you to translate some material from Spanish into your language, or ask you to correct a translation made

by another person. The process of translating materials is quite different from writing an original composition. Here we present only an introduction to the theme. The part that covers ambiguity can be applied to any writing, not just to translation writings.

1. CORRECT, CLEAR and NATURAL

A good translation is correct (accurate), clear and natural. If you are asked to translate material from Spanish into your language, do it in the style most natural to your language. Do not translate word for word, but rather express the meaning of the complete phrase or sentence; it is not important to have the same number of words in the translated sentence as there are in the original sentence.

Do not, however, completely change the meaning of the original; the meaning should be the same, and it should be correct.

Do not think that the order of the words in Spanish is more nearly correct. Use the most natural order of words in your language, because if you don't, your translation will not be clear, and will not be easy to understand.

The following steps will help in the translation process (for example, from Spanish): 1) read all of the original in Spanish, looking up in a dictionary the words that you do not understand, 2) make a tentative translation, using the original Spanish, 3) put aside the original and without consulting it, try to improve the way the translation is expressed until it is clear and natural in your language, and then 4) return to the original to make certain that the meaning is the same (correct).

Practice:

1) Read the four Spanish translations of the following English sentence and find the correct, natural and clear translation in each case.

A. I am hungry.
   1) Yo soy hambre. (I am hunger.)
   2) Yo soy hombre. (I am man.)
   3) Yo tengo sed. (I have thirst / I am thirsty.)
   *4) Yo tengo hambre. (I have hunger / I am hungry.)

B. Write it on the blackboard.

5) Escriba aquello en la negra tabla. (Write that on the black board.

6) Escríbalo en la tabla negra. (Write it on the black board.)

7) Escríbalo en la tablero. (Write it on the _____.)

*8) Escríbalo en el tablero. (Write it on the blackboard.)

2) Is it satisfactory to translate word for word, as in Numbers 1 and 5?? Why not?

3) The translations that are clear and natural, but not correct are numbers _____.

4) The translation ought to be exact _____ and _____.

5) The four steps for translating material are:

6) Using the four steps, translate from Spanish into your language one of the following (have samples of these available):

a) something about first aid,

b) a short story, or report,

c) a part of '*El valor de la persona en la economía Guahiba*' by Marcelino Sosa, for example, 'El arco de Brazil', page 41,

d) something interesting from a book of science or history.

7) Check whether your translation is: 1) exact, 2) clear, 3) natural.

8) Read it to another speaker of your language, or have him read it, to check for translation accuracy and whether or not it is clear and natural in your language.

2. AMBIGUITY

In order to be clear, the writing should not have ambiguous sentences (which have more than one meaning).

1) Many words or sentences can have more than one meaning, and at times the context does not indicate clearly which meaning is meant. Examples: ¿Cuál era? (Which was it? or What was it?); No los creo. (I don't believe them. or I don't make them.).

2) Many times the writer is not aware that the ambiguity exists because he knows what he wants to say, and always reads the

sentence with that meaning. Therefore it is helpful if others read the material. They do not know what it ought to say, and can more easily fall into the trap caused by the ambiguity (not understanding well).

3) If there is not another person who can read what he has written, the writer should put aside the manuscript for several days (or weeks), until he has forgotten what he wrote, before attempting to see if he wrote with clarity, without ambiguity. (He may also find that he has forgotten to say certain things that he thought he had said).

4) If you find something ambiguous, do not think that the reader will figure it out; change the sentence so that it doesn't have two meanings.

EXCERPT V: Literary Criticism

Literary criticism is the art of judging literary works like poems, stories, dramas, essays, reports, etc., that is to say, examining their worth. To judge a production is not something negative, but is rather to examine the good aspects, beautiful and well written, as much as the weaknesses and inferior aspects. To know how to criticize (evaluate) a writing helps the editor in his evaluation of the presentation of the material (second stage of the check).

In each one of the following twelve themes a different aspect of literature is examined, in order to know how it is used to improve the writing. It would be possible to add more themes, but these are the principal ones.

Theme I: CORRECT, CLEAR and INTERESTING

The writing must be correct and clear. Also it must be interesting to the reader, whether boy, girl, youth, man or woman.

1. Boys like to read about boys and boys' things.

2. We must not forget the girls; they like to read about girls and girls' things. (If it is possible, some of the authors should.be women.)

3. One way to know that the writing interests adults and youth (and children) is to ask them about their interests and their problems. (Make an inquiry.)

4. For children and adults it is more interesting to learn by means of stories and anecdotes (instead of direct arguments, although it is good to include a little of everything).

5. When you are editing, think if perhaps it will be necessary to include anecdotes. Ask yourself: Is the content of the writing (the theme and the vocabulary) appropriate for the age of the readers?

Theme 2: ACTION and DIALOGUE

Action and dialogue make the writing interesting.

1. Children like action.

2. Dialogue between persons contributes to making the story more interesting and not too short. It is interesting to know how the people are reacting and what they are saying and thinking.

3. The dialogue ought to be typical; in that way it makes the story more real.

4. Does the writing that you are editing need more action or a little dialogue?

Theme 3: DETAILS

Details can make the story more interesting.

1. One can choose very precise words. (For example, one can choose words or phrases that are more precise than the words *to do, man, house, to be*).

2. To add details is to tell a little more about the same happenings or the same people.

3. If you do not know what to add, answer these questions: when?, where?, who?, what? how?, why?.

4. Readers like details very typical of the culture and/or region.

Theme 4: WELL-KNOWN THINGS

Well-known and common things are more interesting than unknown (new) things, although people like to learn some new things.

1. Writers who make people laugh or cry talk of very common, familiar things which all understand. The readers will say: "Yes, that's the way it is. That's the way we are. He is an author who knows."

2. They like the things that they are always thinking, but never before had they heard them expressed in such a good way.

3. To express what everybody knows in a new and interesting way is to make things (like the house, the road, the hat) talk. This is to personify an object. (Two poems in the manual for indigenous writers are examples.)

4. If the writing doesn't have savor, would it be better to add something that is familiar, or to make a comparison between the new thing and a very familiar thing?

Theme 5: SUSPENSE

In certain stories it is interesting to have suspense, that is to say, not to tell to the reader what is going to happen beforehand. Thus he will be waiting with expectation to know the result, and he will not put the story aside before finishing it (in order to know the ending). The word 'suspense' is of the same family as the word 'to suspend'. The reader remains suspended in the air until he knows what happened at the end of the story.

1. Progressive riddles have suspense, for they tell general clues first and wait till the end to give the specific clues. Thus the reader keeps on reading to know the end of the story.

2. A story has suspense if the reader does not know until the end how things are going to turn out. It has suspense if the steps are lengthened (or if there are more steps) before knowing what happened. Some authors like to make the readers suffer, having them wait and wait until arriving at the climax of the acts and then knowing how it turned out. The readers also like this.

3. Sometimes the author gives clues so that the reader may guess how it will turn out.

4. Sometimes the author tells the reader how it is going to turn out, but the main person of the story does not know how it is going to turn out, and there is suspense until that person knows.

5. Does the story that you are editing involve suspense? Are there certain details that should not be included until later in the story?

Theme 6: The PLOT

Certain stories have a plot or tangle which makes them more interesting.

1. Five steps of a good plot (according to Betsy Edwards) are:
a) the introduction (or opening of the situation),
b) the unfolding (the beginning of the action),
c) the suspense (or the plot or tangle),
d) the climax (the culminating moment, the solution, what happened),
e) the conclusion (what they thought after, the moral, etc.).

2. For a fiction story (which is not the truth), the author can look for a problem which his readers have and consider that the chief person in the story has this problem, the tangle it causes him, and how the problem is at last resolved. (The Guahibo wrote stories of this kind for their Christian publications, after thinking and asking about the problems of men, women, youth and children. They used real experiences as a base, in order not to consider things which were not real problems in their lives.)

3. Does the story which you are editing have the steps of a good plot, in correct order?

Theme 7: THE SETTING

A short description of the setting (place, surroundings) of the events helps to make a story more interesting.

1. If the author tells something about where the events happened, the reader can better visualize all the story.

2. It is not necessary to describe all at the beginning; you can include the information little by little, with the introduction of the persons and the first events.

3. The author will include the most important details of the setting, thinking of one or more of these:
1) What do you see?

2) What do you smell?
3) What do you feel (wind, heat)?
4) What do you taste?
5) What do you hear?

Example: (including sight, smell and sound) When I went to the farm I was delighted. What a pleasant smell! I noticed the pleasing odor of hot syrup. I saw piles of firewood in the corner, and the flaming fire where they were cooking the syrup. I seemed to hear them playing guitar music and singing songs in the distance.

4. Will to tell something about the setting make the story that you are editing more interesting?

Theme 8: The CHARACTERS

The story will be more interesting if the characters have their own personalities, instead of all appearing the same.

1. It is more interesting when the reader discovers the personality of each person rather than the author telling him directly. Through the dialogues and the way that each person does things, the author indicates what that person is like.

2. It is very interesting when the characters have their own names. If it is not appropriate to reveal the names of the persons of a real story, you can change the names.

3. Think whether some names in your language are more interesting than others.

4. Think whether the story that you are editing needs more details which show the personality of the characters.

Theme 9: EMOTIVE WORDS

Each language has special words which make the reading more interesting. Many of them are interjections (that is, exclamations and words which give courage or spirit).

1. What words of your language express surprise, jubilation (great joy), anger or remorse for a mistake (such as stepping on the foot of another person unintentionally, etc.)? These are words which

are expressed spontaneously (rapidly); the persons in a story might use them.

2. In your language, how are emotions or attitudes of disgust, compassion, thoughtfulness, emphasis, remorse (for some condition or act), etc. expressed? These expressions are those which touch the emotions of the readers and make the story more interesting.

3. At times the older people use very typical expressions when they talk. Are there expressions which only the women use?

4. Consider whether you can use some of these special words in the writing that you are editing, in order to improve it.

Theme 10: ONOMATOPOETIC WORDS

Onomatopoetic words (which imitate sounds and movements) make the writings more interesting.

1. Comic strips contain many such words. They are very expressive.

2. You can expand a word by using a special intonation. For example: "Mamaa, come! Help me!" (In Guahibo, when a word is lengthened, it can indicate greater distance.)

3. Onomatopoetic words imitate sounds of animals, persons and things (like the water, the wind, motors, etc.).

4. From time to time, the author invents an onomatopoetic word, using it only one time.

5. See if you can include in the writing some onomatopoetic word, to make the writing sound more interesting.

Theme 11: VERISIMILITUDE

A story has verisimilitude when it seems true and can be believed to be true. Even fiction stories (invented) ought to be realistic; they should be believable.

For example, when a person has never committed a mistake and is perfect in everything, he is not a credible person, because nobody is perfect. In the same way, nobody is completely bad. The characters

ought to be like real people, and credible, especially when they give us an example for our lives.

The following things help to make our stories realistic:

1. The use of details. When the author uses many details, he gives the impression that he witnessed the happenings.

2. The use of dialogue. When the reader knows what the main character says and thinks, he seems more real. The reader doesn't have to believe only the opinion of the author but can form his own opinion of the character.

3. The use of complications in the plot. It is not normal that problems are resolved too easily or that a person with a bad habit change this habit from one moment to another and never have any more problem. Real solutions come more slowly and with more effort. Not all efforts result positively.

Theme 12: TELLER OF THE STORY (POINT OF VIEW)

The story can be told by different persons. Here are some possibilities:

1. First person narrator
   a) Told in first person (' I '), but he is not the author. For example: Arthur Cova in the story of the maelstrom. Though Arthur Cova disappeared at the end of the story, he left his story written in his diary.
   b) The author writes in the first person, but he is not the main person.
   c) The author writes in the first person, and he is the main person. Autobiography.

2. Third person narrator
   a) The narrator cannot see anything except what the main person sees.
   b) He knows only what the main person is thinking.
   c) The other characters must show by their acts and words what they think and what kind of people they are.
   d) It is very real, for none of us knows what the other thinks if he does not show us what he is thinking, nor can we see happenings if we are not there.

3. Semi-omniscient narrator
   a) The narrator knows what two (or three) persons in different places are doing.
   b) He knows what two (or three) persons are thinking.
   c) The fewer persons 'accompanied' by the narrator, the more credible the story.

4. Omniscient narrator
   a) He can be in any area, like a supernatural being.
   b) He knows what everyone is thinking, like a supernatural being.
   c) It is difficult to handle this narrator (or viewpoint) in a credible way.

EXCERPT VI: How to Teach a Writers' Course

1. THE INDIGENOUS EDITOR

The work of the indigenous editor will depend on who are writing books in the mother tongue. If the government or other entity is contracting editors or translators, they will also need an editor (also called reviser or proofreader, according to the work) who knows the language well. At times they desire to have a committee of revisers composed of speakers of different dialects and of different ages.

But if no one is interested in the need for books in his mother tongue, perhaps it will fall to you to arouse the interest of the community. A community awakened and with goodwill can produce its own literature.

Much can be accomplished through the leaders of the community, with the participation of all the people. You can begin by asking them if it is important to preserve aspects of their culture by means of its written form, and if the children who do not yet understand Spanish ought to have books in their own language in order to learn more quickly, with understanding and enthusiasm.

2. THE HISTORY OF THE COMMUNITY

A community project that has been popular in some communities is the compilation of the history of the community. The young people, profiting by the questions in the Manual for Indigenous Writers (pages 46-47), interviewed the older people and wrote what they told them. (It did not matter if more than one older person

answered the same question, because each one told different details.) Then the editors organized the data in more or less chronological order with subtitles, and corrected the mistakes. Other persons made the illustrations, guided by the older people so that the details would be correct. Perhaps a project like this would serve to awaken the community.

If the community do not have funds for paying for the publication, it would be possible to print the books in the same community with a simple duplicating machine. The members of the community could sell food and artifacts to pay for the cost of the stencils, the ink and the paper. For small editions of small books this method is economical.

3. BOOKS FOR THE LIBRARY

If your community has one or more schools, the school children will be delighted to have books in their own language in the school library. To produce them you could give a course for writers, sponsored by the community. (The community would choose the participants.) Before giving the course, you should know how to write stories (having practised what you are going to teach), also how to type stencils and how to print them on the duplicator, if that is going to be the method of publishing the books. You can use the Manual for Indigenous Writers as the textbook. You will need the machines and materials (see the list given previously).

The writers ought to remember for whom they are writing, and that children like to read about children. You can provide many ideas, so that they do not write only a story that they have heard in Spanish. In the appendix of the Manual are simple instructions for the writing of different kinds of material, with examples and a list of ideas. Choose the kinds of writings easiest and most appropriate for the community. Add other ideas to the lists, ideas that originate from the culture. If you do not provide ideas, your students will waste much time thinking of what they are going to write about.. But the students should not be limited to the ideas of the Manual if they can think of others.

When the writers have written something, you can give suggestions for improving their writing; for example: more details, dialogue, change of order if it is not very good, etc. (For advanced writers, teach literary criticism.) But first you can warn them that the

best writers revise their story many times. IMPORTANT: Tell the writers the part of the story that pleases you before giving them suggestions about how to make it 'even better'. In this way you will not discourage your students.

When you have checked and made suggestions the best you can, you can help the writers to correct the details, with your experience as editor. When a book is ready to print (perhaps not at the end of the course but some weeks or months after), your students can help you with the printing and binding of the books. Sewing the books with thread or nylon lasts longer than stapling them with staples which rust. Then the copies will be ready to distribute to the schools which have libraries.

4. SCHOOL SONGS

In the schools of your community, do they sing educational songs in the mother tongue or only in Spanish? The writers of the community can write songs in the mother tongue. If it is your responsibility to edit them, remember these points:

1. They must have good sense. Do not use poor grammar just to fit the music. Change the words until you have a good balance between the sense and the music.

2. So that they will be easy to sing, the number of syllables in each line should correspond with the number of notes in the music.

3. The music could be of an educational song in Spanish, a popular song or a song in the mother tongue. Or you can invent new music. In the latter case, it would be good to tape the music so as not to forget it.

4. Some ideas for words of the songs are the following: 1) the vowels (in your language), 2) the numbers, 3) the alphabet, 4) sounds that animals make (or other sounds), 5) names of different stars, 6) the colors, 7)'mother' and 'daddy', 8) the names of the rivers, 9) the grasshopper (or other insect or animal), 10) the canoe (or other well-known thing), 11) the correct form for greeting different relatives or visitors, 12) characteristics of a good little girl, 13) characteristics of a good little boy, 14) the work of men and of women, etc.

Note: *ISBN, International Standard Book Number

Book Review

Corbeil, Jean-Claude, 1986. The Facts on File Visual Dictionary. Facts on File Publications. New York.

Reviewed by O. Shell, SIL, Dallas..

The Facts on File Visual Dictionary contains 797 pages including table of contents, general, thematic and specialized indexes and selective bibliography. It presents twenty-eight themes, each with subthemes. The themes presented are: astronomy, geography, vegetable kingdom, animal kingdom, human being, food, farm, architecture, house, house furniture, gardening, do-it-yourself, clothing, personal adornment, personal articles, communications, transportation, office supplies and equipment, music, creative leisure activities, sports, measuring devices, optical instruments, health, energy, heavy machinery, weapons, symbols.

The items in the themes and subthemes are not described or explained by words, but are illustrated in black and white (or gray) drawings which are clearly labeled. The presentations include words useful to the average person rather than terms known only to specialists.

The dictionary does not enumerate items within a category. For instance, rather than list the different types of trees, it selects a typical representative of the tree family and illustrates and lists each of its parts.

As an example of content, we choose the section on Music. The headings and pages are: musical notation 2 pages, stringed instruments 2 pages, keyboard instruments 2 pages, wind instruments 2 pages, percussion instruments 2 pages, traditional musical instruments 3 pages, examples of instrumental groups 2 pages, musical accessories 1 page, symphony orchestra 1 page, electric and electronic instruments 2 pages.

The dictionary is a novel presentation of carefully selected content portrayed in detailed illustrations whose parts are clearly labeled. The whole has great potential for clear, efficient communication.

THE RENDILLE PROJECT

Noela Elvery

AFA Audio Consultant

Elvery's article, prepared for the Africa Area Literacy Consultants Training Seminar, Yaoundé, Cameroon, January 1988, contains excellent hints and how-to information for those desiring to include audio in their programs. She tells about the Rendille project in which Nick and Lynne Swanepoel of SIL are engaged. Excerpts of Elvery's paper are presented here.

The 25,000 plus Rendille live in northern Kenya, east of Lake Turkana and west of Marsabit. The area they inhabit has been described as the most arid in Kenya. The majority of the Rendille people still practise a nomadic lifestyle. They keep camels and graze them all over the 15,000 square miles that make up the Rendille area.

Their original grazing areas extended well beyond where they are at present. Security has become a major factor in reducing the boundaries of the Rendille area. Stock losses to armed raiders to the north and east of them compounded by a severe drought in the seventies and another in the eighties resulted in large sections of the Rendille population being deprived of their only means of subsistence, their herds. Effective government policy has greatly reduced raiding.

Anthropologists seem to agree that pastoralism is the most practical way of life for the people of the arid areas of Africa. Only a good education can ensure successful ranching and limit environmental destruction. It has also been concluded that the best way to reach preliterate nomads is by an audio-cassette program. After a public meeting with the Rendille, addressed by the Audio Consultants explaining how they could receive teaching through this means, the elders formally requested such teaching; their response was immediate and enthusiastic.

I. Projected Plan

In order to make the Rendille both self-reliant and able to contribute effectively to the country's economy and development, Nick and Lynne Swanepoel, the SIL linguists, have two projects in mind:

1) a restocking project to make all those dependent on food relief self-sufficient, and

2) a literacy and audio-cassette project to enable the Rendille to fit into the overall development of Kenya.

The concern is for the ninety-five percent of the Rendille people who cannot read or write. For them it is envisaged that an audio-cassette project would prepare them for a full-scale literacy project.

The goal of the project is to provide cassettes in Rendille in order to:

1) - promote literacy amongst the preliterate Rendille people;
2) - provide teaching on animal husbandry;
3) - provide health teaching;
4) - provide teaching on environmental protection;
5) - provide teaching concerning the history and the geography of Rendille;
6) - help preserve the Rendille culture for the Rendille people;
7) - assist the Government in informing all the people about the aims and goals for the Rendille;
8) - assist all churches in providing Scripture and hymns in the Rendille language.

The estimated costs are:

First Year:	
70 Cassette players	$2,800
Reel tapes for original recordings	100
Cassette Masters (Library/duplicating)	50
Casette for distribution 600	800
Batteries (1 set per month)	1,000
Printing of accompanying booklets	600
Travel costs:	
Audio technicians	600
Travel to and from clan villages	2,000
Salaries:	
Audio supervisor	1,350
Two people preparing materials	500
Other	200
Total	10,000

For each of the other years:
2nd, 3rd, 4th, 5th US $ 6,000 per year

II. Strategy

Rendille are nomadic camel herders. They live in clan villages. Each clan village consists of over forty households. Each household consists of either husband and wife and their younger children or just a mother and her younger children. (Rendille widows do not remarry and as most Rendille men marry at about thirty years of age to girls of about thirteen years of age, there is consequently a high proportion of widows.) In each clan village all the married men (elders) have equal status and rule by consensus in decision-making. Older children and younger teenagers live at the animal camps, often twenty to fifty miles from home.

The elders, being the decision-makers are the primary target group for an audio-cassette project. Once they are convinced of the feasibility of education by tape, it should greatly enhance a self-perpetuating and enthusiastic Rendille audio project.

The audio-cassette effort will commence in Korr (one of the two main Rendille centers which are also watering points). Then as the project becomes self-perpetuating it is hoped to have a large-scale audio-cassette project in all the distant nomadic clan villages.

III. Order of Activities

1. Translators prepare materials together with Rendille speakers for recording (as per project goals stated above).

2. Have the audio technicians go to Rendille country for taping of prepared materials.

3. Provide each of the clan villages around Korr with a cassette tape player and batteries.

4. Build up a library of Rendille cassettes to be presented to the community at the completion of the project.

5. Train and equip a Rendille speaker as a supervisor over the audio project. This person will be responsible to oversee the productive and careful use of the players in every village. He will know how to use any accompanying booklet to promote literacy. This person will also be trained to do maintenance on the players.

IV. Conclusion

The Kenyan Government has repeatedly encouraged the nomadic Rendille to settle in order to get an education. Yet it would be environmentally devastating for all the Rendille to remain settled in one area, as overgrazing and the need for firewood have already turned the settlements into wasteland. The answer to this complex problem lies in encouraging pastoralism (restocking and self-reliance) but also in creating a self-propagating, clan-based audio project which will be an aid to literacy. Every Rendille can have the opportunity to become a literate, self-reliant pastoralist, contributing to the development of Kenya.

Update on the Rendille Project

With special funding from TEAR fund (Britain), the audio project has been implemented. Additional cassette players have been purchased as available.

Following the initial recordings, distribution was implemented through trained monitors. The monitors played the cassettes primarily to the adult preliterates in the clan villages, with special reference to the elders (married men) who are the decision-makers.

Evaluation has been made of the impact and acceptance of the content as well as the interest in using cassettes as a teaching tool. Also, included in the follow-up, evaluation has been made of the problems encountered with the cassettes and the equipment, and of how these have stood up to the desert environment. Based on the 'findings' from the evaluations, additional programs were prepared and recorded on the subjects requested. Cover bags were made to give additional protection to the machines and cassettes. More people were involved in the production of the recordings.

MASS LITERACY PROGRAMS

John Watters

SIL, Cameroon

Some thoughts concerning mass literacy programs crystallized for John Watters during conversations with Prof. John Cairns, when he was in Cameroon to carry out the evaluation of the CIDA-sponsored[1] literacy program. Watters says of Prof. Cairns: He has one of the most extensive experiences of anyone in the world in terms of mass literacy, having directed the literacy department in UNESCO for over a decade when the mass literacy programs in Iran, Cuba and elsewhere were in progress. Watters' descriptions of two of the areas for which thoughts crystallized for him are repeated here:

1) general cultural factors conditioning literacy programs,

2) the implications of these factors for our language teams and their morale.

A brief addendum follows.

I. General Cultural Factors Conditioning Literacy Programs

It may be possible to classify cultures along certain parameters which condition the kinds of literacy activities that are possible in one community as opposed to another. The hypothesis that crystallized for me assumes that there are at least three general conditions which play crucial roles in the development of mass literacy programs in a given society or culture. (Success in these programs would include both the community's initial learning of literacy and numeracy skills, and its ultimate retention and use of those skills over the long term.)

The first condition has to do with the openness of the society to change and its desire to 'better' its living conditions. What I have in mind here is the felt need of the given community to pursue some of the benefits of the modern, industrial state. These benefits may be in the areas of health, agriculture, education, communication, and so on. This might be called the developmental factor in literacy programs.

The second condition turns on the question of local leadership. In various cultures, the younger generation of leaders and entrepreneurs is still present at the local, village level. They have neither left for the city as uneducated poor in search of low-level jobs, nor have they been educated to such an extent that they are largely

employed by the government in either high-level or middle-level jobs in urban centers. This condition might be called the leadership factor.

The third condition involves the homogeneity of the given community. The more homogeneous a given community is linguistically, culturally, geographically, politically and religiously the more chance there is for success in a mass literacy program in that community. This condition might be called the social cohesion factor.

Given these three different conditions, there could theoretically be eight different sociocultural situations in which teams might find themselves. We could treat these conditions as feature complexes in which the values would be treated as follows: homogeneous [+H], nonhomogeneous [−H], open to 'development' [+D], closed to 'development' [−D], youthful leadership at village level [+L], and youthful leadership not at village level [−L]. The eight possible situations would be:

1	2	3	4	5	6	7	8
[+H]	[+H]	[+H]	[+H]	[−H]	[−H]	[−H]	[−H]
[−D]	[−D]	[+D]	[+D]	[−D]	[−D]	[+D]	[+D]
[+L]	[−L]	[+L]	[−L]	[+L]	[−L]	[+L]	[−L]
A	?	B	C	no	?	no	D

However, of the eight possible situations, it appears that only four will probably be encountered: namely, Situations A, B, C and D. This restriction is due to two redundancies. First, it is unlikely that a youthful leadership, even if present, would be able to promote mass literacy if the community is not homogeneous. Thus, [−H] implies [−L]. So, in effect, Situations 5 and 7 would not be found. Secondly, a community whose youthful leadership has basically left the villages is probably a community that is also open to development. Thus, [−L] implies [+D]. So, in effect, Situations 2 and 6 are unlikely to be encountered.

On the basis of these restrictions, the four different types of sociocultural situations would be A, B, C and D. We might think of these linguistic communities along a scale of homogeneity, beginning at one end with those communities which are fairly self-sufficient and operating in and of themselves, to those which are disintegrating and whose members are being integrated into the larger national culture.

We can begin with the first type of language community, that characterized as Situation A. These societies are homogeneous and their youthful leadership is present at the village level. However, there is no clear indication that they are open to or desiring change in their society. For an SIL team to work in such a group, especially with those who are nomadic, it would seem that the only kind of literacy program that could be pursued would be basically a one-on-one type of program. There may be individuals in the community that are open to change, but it is unlikely that there will be any mass movement toward literacy.

The second type of language community, represented by Situation B, is the community which meets all three conditions: the community is open to change, their youthful leadership is present, and they are still a homogeneous society. Many languages in north Cameroon and in Chad fall within this type of situation. Also, from what I can gather concerning the successful programs in northern Ghana and the successful program carried on by Uwe Gustafsson in India, these conditions have all been met and contribute significantly to the success these programs have experienced.

For the third category of language community, represented by Situation C, the conditions are less clearly met than in the case of Situation B. The community is not only open to change, but already well into the process of change. But it has gotten to that point largely through the use of oral communication, not through literacy. Even in community activities where written communication is used, a trade or national language usually already occupies the domain provided by that activity, making the use of the local language in that domain difficult (but not necessarily impossible). In addition, the youthful leadership of the community has basically left the village for the urban centers. Their young elite are generally well-educated and have important leadership roles at the national and regional levels, rather than at the village level. For this reason, these communities lack the necessary local leadership to take the initiative in a mass literacy program. Even though most of these communities remain homogeneous, the difficulties met because the leadership condition is unfulfilled lead to real problems in trying to establish a mass literacy program. Instead, it would be my hypothesis that the best type of literacy program in these cases would be one which focused on specialized interest groups such as churches, cultural associations, cooperatives and so forth. Thus, whereas in Situation B mass literacy

is clearly indicated, in Situation C mass literacy is generally counter-indicated.

Finally, the fourth type of language community is what we may call Situation D. In such a community, not only have they gone beyond Situation C in terms of change and loss of leadership, but also they have lost a great deal of their homogeneity as a language community. In many cases, the individual members of the community have adopted a second language and are well on the way to being integrated into the larger national community or a larger neighboring linguistic community. In these cases, implementing a literacy program is highly questionable and at best involves a program for either specialized groups or for isolated individuals. In the most extreme cases, there would be serious questions as to the viability of the language into the next generation.

II. Implications of these factors for our language teams

If this hypothesis concerning language communities and their readiness for literacy is correct, then I believe it is crucial to communicate this to our SIL teams. Prof. Cairns' basic experience is in the area of *mass* literacy campaigns which are heavily sponsored and subsidized by national governments. In SIL our members are not involved as a general rule in such literacy programs. In Cameroon many of our teams are involved in language communities of Situation C in which literacy as a mass movement may never come about. The optimal conditions for such a mass movement may have passed and may never be met again. Such teams should be encouraged to do all they can within the context in which they find themselves. On the other hand, we need to encourage the teams in contexts where these conditions are met. They have more of the possibilities available to see a mass literacy campaign or program implemented. So this hypothesis has implications for how we might allocate resources, both human and material.

Another implication concerns team morale. Teams should not compare their programs with other programs and therefore inappropriately become discouraged or overly elated at their success. Teams should be supportive of one another and try to understand the unique context in which each team works in terms of motivating literacy. I believe that some teams could be extremely discouraged about the limited success they have seen. Yet if we look at the broader picture, we may see that the successes they have had are

indeed significant successes given the conditions under which they work. As Prof. Cairns said, again thinking of mass literacy, it should not be necessary for the language team to preach at the people about getting involved in a literacy program. If the community is not ready, it cannot be forced into readiness.

III. Addendum: further notes from Watters as a result of his visit with Prof. Cairns

There are certain crucial factors for success in a mass literacy program. These include:

- at least some informal institutional support,
- a local promoter,
- a team to provide organizational, administrative and material help,
- monitoring motivational levels and areas,
- keeping careful classroom records on individual students,
- numeracy is as important as literacy in any campaign and should be included.

The postliteracy phase is crucial to the overall success of the program because of the always present problem of literacy regression. Without a postliteracy phase, the literacy phase is often useless. The goal is to strengthen the literacy context so as to maintain literacy. Some actions that may be taken to maintain literacy include:

- small village newspapers with current information (these may be handwritten or typed, single sheets written on only one side, etc., in other words, simple),
- small libraries where readers may borrow books;
- reading clubs and writing clubs might also be developed;
- in any program, a newsletter for teachers is helpful, even if there are only twenty teachers involved in the program. Such a newsletter like 'Teachers' Tips' builds both morale and professionalism among the teaching corps.

Prof. Cairns suggested that five to six hundred contact hours are required before a student who was initially illiterate can be considered 'literate'. Only at that point can the student be considered to have entered the postliteracy phase.

Language Committees should be spontaneous, locally motivated structures and structured within the traditional society, rather than 'new' externally imposed structures.

As much as possible, a literacy program should be tied into some development activity or recognized, functioning institution. The teaching of content should be made at least as important as the teaching of the symbols.

[1]CIDA, Canadian International Development Agency

World Education Conference

A World Conference on Education for All--Meeting Basic Learning Needs has been scheduled for Bangkok, Thailand, from March 5 to 9, 1990. The following organizations are sponsoring the conference: The United Nations Development Programme (UNDP), United Nations Educational, Scientific, and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), and the World Bank.

The conference will bring together world leaders, government delegations from all countries, international and nongovernmental organizations, and eminent educators, for the purpose of forming a global commitment to providing Education for All through good quality primary schooling for all children around the world and essential knowledge and skills for adults to cope with the demands of the modern world.

For further information about the conference, contact Wadi D. Haddad, Executive Secretary, Inter-Agency Commission for the World Conference on Education for All, UNICEF House, Three United Nations Plaza, New York, NY 10017, USA.

SIL LITERACY PROGRAMS IN THE PHILIPPINES: WHERE WE CAME FROM AND WHERE WE ARE GOING[1]

Doris Porter

SIL, Literacy and Literature Use, Philippines

I. The Historical Overview
II. What Constitutes a 'Complete' Literacy Program?
III. A Case Study
IV. Where Do We Go From Here?

After some thirty years in the Philippines, literacy programs of the Summer Institute of Linguistics (SIL) have experienced many alterations. They have evolved from an 'everyone do what is best in his own eyes' philosophy to literacy programs which are fairly structured and systematically controlled. This paper, however, is not meant to give a detailed history of this evolution. Rather, the intent is to describe the present situation in terms of philosophical base and current directions. But in order to better understand where we are at this point, we need to at least capsulize that history.

I. The Historical Overview

In the early years of SIL's operation in the Philippines, technical teams came to their field work with very little training either in literacy principles or in development of literacy materials. As various personnel gained experience, however, the lessons learned were passed on to others. Most people took a very pragmatic outlook. If it works, use it. A few people with a pedagogical background were able to develop some very workable materials and became a help to others.

By the early 1960's, more help was available in the prefield training programs of SIL personnel and a methodology was developed and refined by the late Dr. Sarah Gudschinsky whose field experience with SIL was in Mexico. Dr. Gudschinsky's approach was basically a syllable method. About the same time, a primary school teacher in the Philippine Branch suggested a model based on the Hay-Wingo phonics approach. This was tried by a number of teams and was mostly successful. Since that time, probably the most common

approach in the Philippine Branch in terms of primer methodology has been phonics or an adaptation of phonics.

At the same time we were refining materials to teach the basic skills of reading and writing, the Branch was developing a department which could make use of experienced people to assist the many who were still in the novice class. Most of this assistance was given at periodic workshops which would focus on a particular area of need, such as preprimer and primer production, or training literacy lay teachers or training indigenous writers.

As the needs of the once preliterate communities changed, so materials and programs had to change. In terms of materials we needed to expand into fluency building, second language bridging, and add to knowledge in relevant content areas such as health and nutrition, agriculture and some basic mathematics. For our programs we needed more clear-cut definitions of our goals and objectives. We needed to delineate how the needs differed in various projects. We needed to determine what directions programs should take in order to best accomplish these goals and community-felt needs. And also we needed a systematic evaluation program in order to measure progress and make whatever adjustments might be necessary along the way.

Thus it was that we began to expand programs, develop personnel, and set up a procedure to meet these various needs. However, because the total program of SIL field workers is so immense, it has been essential to take a hard look at the total picture and set some priorities in terms of realistic objectives. We discovered we had to cut some corners somewhere. No one person or team can do all the linguistic analysis that could be done, or translate as many pieces of literature as he would like to do, or research all the cultural features he would like to pursue, or provide for all the community development that is needed, or bring as many people as he would like as far as he would like into literateness. Even by involving as many nationals as possible in the task (which we do), it is still beyond the time, energy and resources of a single team. So far we have not had enough personnel to do much doubling up in projects. Therefore it became necessary to develop a philosophy of realistic expectations set within the bounds of consciously selected constraints.

In the rest of this paper, I would like to define what these expectations are in terms of literacy and literature use.

II. What Constitutes a 'Complete' Literacy Program

Given the overall goals and working within the constraints we have set for ourselves, how do we define a completed program in terms of SIL involvement? What do we say should be in place before we can feel comfortable about withdrawing?

The answer to the question may be summed up in the word 'self-sustaining'. That is, we recognize that it is not likely that all of the literacy needs of the community will have been met when SIL terminates its involvement, but we would feel we have done our job if we (or others who are able to do the same job) have brought that community to the level of having the capacity to operate independently. That is not to say that the standard or intensity will continue exactly the same, but we expect that the thrust will keep moving in the desired direction which is a growing number of readers who both see the value of and increasingly use their literateness. The starting point is likely to be different for each group because of their varying circumstances but the *goal* remains the same.

There are, of course, different viewpoints of what is envisioned in the word 'self-sustaining'. The differences are dependent on the goals of the organization concerned. Therefore we need to further explain what we mean by that term. In the context of SIL, Philippines, 'self-sustaining' may be defined as a literacy program that has gained sufficient momentum in the three vital areas which we feel are necessary for ongoingness. These areas are: 1) motivation and general interest, 2) material production, and 3) trained personnel. The objective is to bring the local community members to the place where they can, and likely will, carry the program to wherever they may want to carry it, within, of course, the bounds of their resources.

It is not difficult to measure whether materials and trained personnel are adequate. Obviously if people have acquired literateness through classes conducted by members of the community making use of the prepared materials, these areas are sufficiently provided for. It is more difficult, however, to determine whether there is sufficient motivation to carry out a literacy program without outside incentives, especially if personnel involved in that program have been on some kind of salary. It is my contention, though, that if literateness becomes a significant value to a critical mass, then pressure will be placed on those who have benefited from literacy to share the good. We can to some degree measure critical mass by the

demand for literacy classes. The demand for literacy may shift to a more dominant language. Even so, we can feel good about the results.

If then, the three above-mentioned vital components are operational, we feel our involvement can more or less be happily terminated.

III. A Case Study

It may be helpful at this point to illustrate our view of a completed program in terms of SIL involvement, by describing one of the SIL literacy projects in the Philippines. The project I have chosen is Tboli. I choose that for two reasons. One is that I am most familiar with that project having worked there for thirteen years and the other is because it typifies a number of other language groups, especially on the island of Mindanao where the greater literacy needs are.

The Tboli literacy project

The Tboli people are located in the province of South Cotabato, Mindanao. There is an estimated 90,000 speakers of this language, living in the central plain of the Alah Valley and spreading out to the south to the seacoast, to the east to Tupi and to the west to Lake Sebu and beyond. They are bordered by speakers of Blaan on the east, Cotabato Manobo to the northwest and Maguindanaon to the north.

Tboli was one of the early language projects undertaken by members of the Summer Institute of Linguistics when SIL began its work in the Philippines in 1953. The first years involved language and culture learning, formation of a practical orthography, and linguistic analysis as well as all the other things that go into establishing a home and relationships in a new and remote area.

Later, when the extent of the literacy needs was established, materials were developed to begin to meet those needs. After considerable testing and revision, a set of primers based on the phonics method was completed.

Progress was slow because of limited personnel. The literacy rate was established to be in the vicinity of five percent or less. There was almost no educational opportunity for a Tboli child. Even the

possibility of education being perceived as having value was barely a glimmer on the horizon. Most adults, if they showed any interest at all, felt that literacy was definitely for children only. They felt they were too busy and too old. Furthermore, they were not convinced that being literate met any real need. A few young people stepped out on a limb and came to classes and learned to read and write. All during this time most of the SIL team's efforts were going into work other than literacy.

More than fifteen years elapsed from the inception of the project before any significant change began to occur. It had taken that much time of persistent effort with a student here, a student there, a few graduates here, a few graduates there. More materials were produced, for the prereading stage, the primer stage and the postprimer stage.

Finally, seven adults were convinced they wanted to learn to read and the first strictly adult class was begun. These were highly motivated people, mainly because they had become Christians and wanted to be able to read the Scriptures which had been translated into Tboli. After approximately 120 hours of instruction, all seven successfully completed the course.

Seeing the accomplishments of these adults provided incentives for others to try their hand at learning to read. And so the ball started to roll. As it gained momentum requests for teachers became more than the SIL team and the few people they had trained to teach could handle. As a result, a full-scale lay teacher training program got under way and classes were begun.

As the program grew, the costs grew. Soon it became evident that the limited finances of the SIL team could not handle a program that would meet the increasing demand for classes. At that point outside funding entered the picture. A proposal went to the Canadian International Development Agency and the Alberta government to undertake funding for the Tboli literacy project as well as a number of other programs which could also use financial assistance.

In 1982 a fully funded literacy program got under way. The outside funding enabled the SIL team to produce and publish additional reading materials, purchase needed equipment, operate training workshops, offer a small honorarium for teachers and supervisors, and cover consultant travel costs.

In the period June 1982-June 1986, the Tboli literacy project produced two literacy coordinators, seven supervisors, 156 lay teachers, and 2,809 new readers. Some eight new titles have been added to the sixty-one which had been previously published, making a total of sixty-nine titles available in the language. These books cover topics in health, geography, mathematics, simple science, cultural stories, folktales, Bible stories and translated Scripture as well as instructional material to teach reading, writing, and to build fluency. Interest in learning to read is high in an estimated eighty percent of the population. Formal education for their children is perceived as highly valuable as evidenced by the increase of Tboli children enrolled in school. So, then, the necessary components seem to be in place. Therefore in our estimation the Tboli literacy program is now ready to stand on its own.

The manner in which more and more people became literate and participation moved more and more into the hands of local people is in some ways the ideal hoped for in all programs. This occurred in Tboli and some other Philippine groups. In others, the results have been much less spectacular.

IV. Where Do We Go From Here?

Currently SIL has literacy projects at some stage of development in twenty-eight languages in the Philippines. A few projects have had to be prematurely cut off from SIL input for various reasons such as lack of personnel or because of peace and order problems. In others, literacy rates are already high enough so as not to constitute a need. In a few others there are needs but no personnel to carry out a program. A full-scale program is four-pronged, working at four levels. It includes 1) basic instruction in reading and writing skills, 2) promotion of the reading habit, 3) indigenous production of vernacular materials, and 4) establishment of distribution channels. The currently operating projects vary from full-scale literacy programs to working on establishing distribution channels only.

Presently there are only three projects[2] which have been brought to the level where we feel we can leave them more or less on their own. In 1987 and 1988 we will be observing them to see if indeed they do prove to be ongoing. These three have all been funded by the Canadian International Development Agency and the Alberta government for the past five years. By saying we will leave them on their own does not mean that we will no longer provide

encouragement, counsel, or reprints of needed materials. It does mean that we will not be paying salaries or funding workshops or training sessions. If at the end of the trial period, the project fails to sustain itself, we would again consider outside funding if warranted by continuing low literacy rates.

There are a number of projects where because of limited literacy needs outside funding is not required. There are others that need only minimal funding. But there are still programs where the need is great enough that to get a program on its feet will require more financial input than the SIL team can handle.

The aim of SIL's literacy programs in the Philippines is to help the communities in the various language groups to reach the level of self-sustaining, ongoing use of literature in the content areas which will best meet their felt needs. This will require various types of programs depending on what the needs are. In some cases the needs have not yet been clearly identified. So the task remaining is to determine what needs are still not met and develop strategies for meeting those needs so that the vast potential for national development residing in the human resources of the minority groups of the Philippines might be realized.

Notes

[1]This article, written in early 1987, was originally addressed to the person who was to do an evaluation of literacy programs in the Philippines which had been funded by the Canadian International Development Agency and the government of Alberta, Canada. It was intended to be background information to help in the evaluation process. The main purpose was to clarify Philippine Branch philosophy regarding the extent of SIL input into literacy programs. It is reproduced here some three years later so some of the statistics may not be up to date.

[2]Two of those projects have succeeded on their own. At this point in time, it is doubtful that the third one will continue very long without outside funding.

Notes On Literacy

No. 62, 1990

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DALLAS, TEXAS

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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

International Academic Bookstore

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
U.S.A.

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LEARNING STYLES AND CULTURE: A PRACTICAL APPLICATION

Pam Gentry

Pamela Gentry has long been interested in the field of learning. She graduated in 1979 with a B.S. in Education from Stephen F. Austin State University in Nacogdoches, Texas. Her studies emphasized the areas of speech, language, and learning disabilities. She subsequently worked as a Speech Therapist in Texas for the Lufkin Independent School District. In 1988 she began graduate studies in linguistics and literacy at the University of Texas at Arlington, and is currently serving with the Summer Institute of Linguistics in the Solomon Islands.

I. Introduction
II. Definition of Learning Style
III. Significance of Learning Style
IV. Evaluating Learning Styles Across Cultures
V. Unanswered Questions and Conclusion
VI. Conclusion
VII. References

I. Introduction

With development of psychology as a field of study in the twentieth century attention has been focused on thinking and learning. Research has attempted to discover universal and individual factors which affect how people process information and solve problems.

Studies of nonwestern cultures give some insight into these areas. Such studies are based on one of two assumptions: that intelligence is based on a measurable innate ability or that intelligence is a culturally based phenomena. Those who promote intelligence as ability based state that some groups of people develop more generalized intellectual abilities than others. The advocates of this position define cognition by specified tasks which they assume will be performed the same regardless of who performs the task. Those who promote intelligence and learning as a culturally based phenomena note how specific skills are transferred within a society.

It is evident that 'primitive' cultures make different sorts of intellectual demands than do 'technologically advanced' societies. For example, the Kpelle people of Northern Liberia are exceptionally good at estimating the volume of rice in a container. This task would

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be very difficult for most Americans. However, the Kpelle people are rice farmers who deal with these measurements on an almost daily basis. Their experience gives them aptitude. Researchers who contend that intelligence is culturally based conclude that as cultural conditions change, the skills that people learn change as well. This view is well supported by the universal finding that children in third-world countries who attend Western-style schools show a marked increase in the development of problem-solving skills (Cole et al 1971).

Given that the ability to learn is generally the same for all people, irrespective of geography or culture, what factors affect the learning process? How can we account for the differences in ability to perform specific cognitive tasks found from culture to culture? This is the question that researchers in the field of learning styles attempt to answer.

II. Definition of Learning Style

Learning style refers to 'the characteristic way in which a student uses information' (Sodeman 1987:1). Extensive research by Witkin and others has shown that people tend to be consistent in the way they approach problem solving tasks and in the attitudes and emotions they bring to a situation (Cole and Scribner 1974:82). Terms variously used in the literature on this subject are: cognitive styles (Witkin, 1967:110), temperament styles in learning patterns (Golay 1982:5), learning strategies (Stringer 1984:6), cultural learning style (Bulmer 1983:22), cognitive learning style (Cohen 1969:828), conceptual style (Lingenfelter and Gray 1981:15), learning style, modality, and perceptual strength (Carbo et al 1986:3,13,91), and cultural values (Mayers, 1979:5). The term(s) used by each author reflect(s) the focus of his/her research and its application. These foci can be grouped into three main categories as cognitive, perceptual and cultural aspects of the learning process.

1. Cognitive learning style

Authors who describe cognitive aspects of the learning process concentrate on the degree of field independence an individual demonstrates. Field independence refers to the ability to see a complex figure as an integral collection of smaller parts. The field independent person is skilled in recognizing detail and organizing features of his environment. Embedded figures are often used to measure one's degree of field independence. For example, in Figures 1a and 1b the individual is told to examine the two figures. He must

quickly and accurately identify the triangle as part of the more complex figure on the right (Cole and Scribner 1974:82). Quick and accurate performance indicates field independence.

1a.

1b.

Authors who concentrate on this cognitive aspect of learning preferences vary in their use of terms. They also differ in terms of the weight that the cognitive aspects of thinking carry in their model of learning style. In the following chart I have collected the terms used by various authors. Like terms are listed together and identified according to the principal writer who uses that set of terms.

Terms for Cognitive Learning Styles[1]

Dawson and Berry (as cited by Cole 1974)	field dependent	field independent
Witkin (1967) (as cited by Cole)	global	articulated
Cohen (1969)	relational	analytical
Carbo et al (1986)	global	analytical
Mayers (1979)	holistic	dichotomizing
Entwistle (1981)	holist	serialist
	right brain	left brain

2. Perceptual learning style

Authors who concentrate on the types of physical stimuli the learner uses most productively describe perceptual aspects of the learning process. Literature emphasizing these aspects variously refers to modalities, perceptual strengths and the visual, auditory, tactile, or kinesthetic learner. Though their terms differ, authors writing on this subject all describe a dependency on, or preferred use of, specific sensory information in the environment. The following descriptions of visual, auditory, tactile and kinesthetic learners are condensed from Carbo, Dunn and Dunn (1986:13-15).

Perceptual Strength	Characteristics
visual learner	- remember what they see - concentrate on recalling 'mental pictures' - learn best by viewing, watching, and observing
auditory learner	- remember 75% of what they hear - store spoken words in their brain like a recorder - learn best by listening to others
tactile learner	- use fingers and hands while concentrating - remember best when they write, doodle, draw or 'fiddle' - learn best by touching, manipulating and handling
kinesthetic learner	- poor recall of what they've been told or have seen - learn best through experiencing, doing, involvement - reinforcement through tactile sense

I would like to note at this point that use of the cover term, perceptual strength, is significant. My experience as a teacher has shown me that very few learners are totally dominated by a particular modality. Most students can use other forms of stimuli in addition to that which they process most easily. The latter are strengths and preferences, not absolute categories. As Marie Carbo points out in *Teaching Students to Read Through Their Individual Learning Styles*, learning is enhanced when new material is introduced through a student's preferred learning style and is effectively reinforced through secondary modalities (Carbo et al 1986).

3. Cultural learning style

All cultures educate their members and the form of that education differs from culture to culture. For example, in traditional Bushman society there is little explicit teaching. The majority of learning takes place through observation and imitation in the context of daily life (Stringer 1984). In contrast, American society is becoming increasingly specialized such that 'real learning' is confined to the classroom. Americans attend cooking classes, driving classes, photography and needlework classes. There are even classes for young children to learn how to play together.

According to Spindler,

> Culture is idealized in the educative process and every teacher defends the cultural drama ... ; world view is encapsulated within each gesture, admonition, indoctrination or explanation (1963:69).

Each culture has a set of values which is reinforced through its unique education process. As this occurs there are two outcomes. First, the members of the society learn how to function within that culture. Second, a preferred learning style is reinforced.

A. Basic values model

Marvin Mayers has identified six pairs of basic values which affect 'different decision-making processes and different learning styles' (Bulmer, 1983:24). The following values and their descriptions were taken from *The Basic Values: A Model of Cognitive Styles for Analyzing Human Behavior* by Marvin K. Mayers (1979:6).

THE BASIC VALUES

The categories of thought utilized in the basic values model include the following patterns of behavior:

Note: A pattern of behavior is observed, *then* named.

Time orientation is concerned with seconds, minutes and hours; when something begins and when it ends; how frequently something is done in a time period; and how orderly it is done, i.e., in relation to schedule and range of punctuality.

Event orientation is concerned with who's there, what's going on, and how the event can be embellished - with light, sound, touch, body movement, etc.

Dichotomism orientation sets up distinction, divisions, categories; concern is with the here or there, right or wrong, this or that; the part is more important than the whole; one starts with the part - not the whole.

Holism orientation is concerned with the whole and the parts as wholes in relation to the whole, patterns and configurations are important.

Crisis orientation focuses on one alternative, that alternative being the only correct alternative and a sharply defined authority system to maintain that alternative, and closure on that alternative.

Non-crisis orientation considers many alternatives, any of them valid and worthy of selection now or later. Therefore, authority is in keeping with alternative, closure is delayed and less intense.

Vulnerability as strength orientation permits admission of error, assumes no loss of respect when there is evidence of weakness, error, or the like.

Vulnerability as weakness orientation covers any error or weakness so that it is not perceived in any way as weakness.

Thing or object as goal causes one to set up timed goals to achieve some object.

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Person as goal causes one to concern himself more with person than the accomplishment of some object. Time schedules may be ignored; programs will be measured more in terms of what happens to the people involved.

Prestige as achieved orientation causes one to work to gain one's respect. Prestige is assigned only to the role.

Prestige as ascribed orientation develops criteria for ascription of respect and prestige, the machinery for receiving this and living up to the expectations of one's ascribed status, and the motivation to live up to that status. Prestige is assigned to both the person and the role that one fills in society.

B. Educational model

Dunn and Dunn identify twenty-one elements that affect learning style (Carbo et al 1986). Though the Dunns do not specifically relate their model to the cross-cultural context, I find a lot of similarity to Mayers' model of basic values. In the following discussion I will relate Mayers' model of basic cultural values to the Dunns' educational model of learning styles. In addition, I will relate other elements of the Dunn model to the cross-cultural context based on my own understanding of culture as gleaned from others with more experience than my own.

The following descriptions of each element of learning style are based on those given in *Teaching Students to Read Through Their Individual Learning Styles* by Marie Carbo, Rita Dunn and Kenneth Dunn (1986:2-20). The authors identify five major categories of elements that affect learning style: environmental, emotional, sociological, physical, and psychological stimuli.

1) *Environmental* stimuli which affect learning style include the elements of sound, light, temperature and design. The intensity, quality and presence of ambient noise within the learning environment affect people in different ways. Some people are aided by the presence of noise while others perceive this as distracting. The intensity of light is also an important aspect for some. Mayers identifies these two elements as part of event orientation in his model. Temperature can also play a role in a person's ability to learn. Though this may be a purely physical preference, it certainly becomes significant in countries that experience extreme temperatures. Cultures which thrive in a hot climate often regulate their activities to coincide with the cool of the day. A wise program planner will pay attention to the effects of temperature on people's work habits. Formal vs. informal classroom design is another environmental element identified by Dunn and Dunn. This refers to a preference for working at a desk vs. sprawling on the floor or moving about the room. In a non-Western context, sensitivity to this element may mean

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having a great deal of flexibility concerning where class is held. It may be preferable to sit under a tree outside rather than within the confines of four walls. The cross-cultural teacher should also be flexible about furniture. The people may prefer sitting on the ground with slates on their laps rather than sitting on chairs at desks.

2) The Dunns identify four elements that are categorized as *emotional* stimuli. First, they cite motivation. This refers to an individual's interest in learning. The cross-cultural worker needs to search for intrinsic motivators within the culture. Often prestige is a good motivator, hence Marvin Mayers' model overlaps in this area as well. Persistence is affected by motivation; it is also affected by the provision of successful learning. The third emotional element is responsibility. Carbo, Dunn and Dunn identify this as the ability to 'follow through on assignments, complete them to the best of their ability, and ... do so without continuing supervision' (1986:8). I would say that this is a culturally specific definition of responsibility. A culture's time-event orientation, crisis-orientation, and goal determination would affect this element. The fourth emotional element relates to the need for structure. 'Some people like to know *exactly* what is expected of them before they begin a project or assignment....' (ibid:11, author's emphasis). This describes a dichotomized orientation which is concerned with right and wrong in each situation.

3) Sociological elements of learning style clearly fall under the category of culturally influenced factors. In many cultures the group takes precedence over the individual. For example, according to Tom Headland, the Agta people of the Philippines are very group-oriented. When he taught them to play croquet the people did not consider the game completed until all the players had been helped to complete the course. When this was accomplished they reveled in their success as a team. According to Mayers' model these people are people-oriented rather that goal-oriented; they value relationships over task completion. In addition to the kinds of working relationships encouraged within a culture, the cross-cultural worker should be sensitive to the recognized and accepted authority structure. This is another area in which a Western goal-oriented person might conflict with a people-oriented culture. In many societies preservation of status roles and privileges takes precedence over 'the most efficient way to get the job done'.

4) *Physical* stimulus elements of learning style include perceptual strengths, food intake, time of day or night energy levels, and

mobility. Perceptual strengths were described in an earlier section of this paper. However, I would like to briefly discuss the effects of culture on perception. Researchers have identified differences in the way people of different cultures respond to stimuli, but they have been unsuccessful in identifying differences in interpretation (Cole and Scribner 1974). It seems that the working principle is this: people are good at doing things that are important to them and they use the environmental information that is relevant to daily living. Carbo and the Dunns note that many learners relate to the need for food intake when concentrating or studying and that most learners have an optimum time of day for processing new information. The cross-cultural worker should note how people prefer to use their day. When do the people work, when do they socialize and when do they spend concentrated thinking time? The amount of mobility preferred by the learner was discussed in conjunction with the environmental element of structure.

5) I find the greatest overlap between Dunn and Dunn's model of learning styles and Mayers' model of basic cultural values in the area of *psychological* elements that affect learning style. The global vs. analytic dichotomy closely follows Mayers' holistic vs dichotomized dichotomy. The global person is identified as one who sees the 'whole picture'; like the holistic individual, he is concerned with overall patterns and sees parts in relation to the whole. The analytic person tends to focus on small parts and details. Similarly, the dichotomized individual sets up distinctions and categories based on parts. He always looks at the smaller elements first. Hemisphere dominance is another psychological element that affects learning style. This is a broad category only briefly commented on by Carbo, Dunn and Dunn. In reference to literacy they cite Levy who says,

> ...the child with a biased arousal of the left hemisphere may gain reading skills more easily through a phonetic, analytic method, while the child with a biased arousal of the right hemisphere may learn to read better by the sight method...the gateway into whole-brain learning may differ for different children... (1986:19).

It is possible that some cultures may tend toward left- or right-brain dominance since these preferences are closely but not wholly related to cognitive learning style. However I have not found any specific literature on this subject.

The final pair of psychological elements are impulsivity and reflectivity. These refer to the immediacy with which an individual responds to stimuli as well as his willingness to take risks and be

flexible. Mayers' crisis-oriented person who shows little flexibility and reacts conservatively to threatening situations correlates with the Dunns' reflective individual. The less analytic, risk-taking, impulsive person relates to Mayers' noncrisis oriented person who is less intense and can delay closure.

The following chart displays the stimuli and elements that affect learning style. I have color-coded the boxes to indicate the areas that overlap with Mayers' model of basic cultural values and those which are generally affected by culture. I have not shaded areas where I have some question concerning the exact relationship to culture.

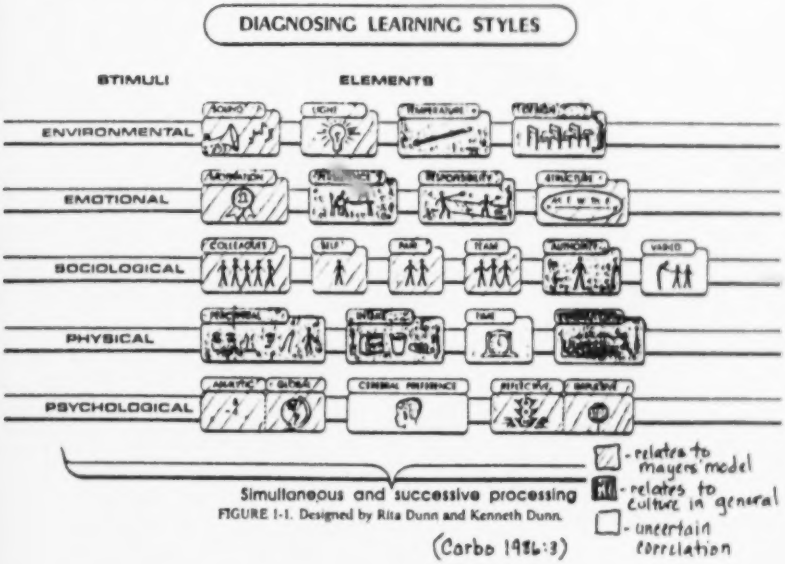

FIGURE 1-1. Designed by Rita Dunn and Kenneth Dunn.

(Carbo 1986:3)

III. Significance of Learning Style

Thus far I have defined learning style and discussed the various premises on which the identification of learning styles are based. Now I will discuss the significance of learning styles in the classroom.

1. Elements of a learning situation

In any learning situation, whether formal or informal, there are at least four factors which interact with one another to affect the acquisition of learning. These four factors are the learner, the institution, the teacher and the method of pedagogy. We have

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discussed various aspects of the learner's inherent learning style. The teacher also has an inherent learning style which affects his/her teaching style (Entwistle 1981). Teachers tend to teach in a way that complements their own predisposition (Carbo et al 1986). In addition, the institutional context within which learning takes place has an inherent teaching style whether it be a mission or government school, a family, etc. (Spindler 1963). Finally, each method of teaching and it's accompanied curriculum is bent toward a particular learning style (Carbo et al 1986). The teaching styles of the institution, the teacher and the pedagogical method must correlate with the style of the learner for optimum ease of learning and long-term retention (Sodeman 1987; Cohen 1969).

2. Mismatching across cultures

In a cross-cultural context the potential for mismatch is even greater because of the disparity in cultural values. For example, Black and Mexican American children tend to be more field dependent, and they learn global aspects of a lesson more readily, especially when they are made personally relevant. In addition, such persons tend to be socially tied into the group, prefer to work cooperatively and have a close relationship with their teacher. These values are not generally helpful for success in the average American classroom where independence, formality and abstract reasoning are fostered (Sodeman 1987).

There are also examples of mismatch within the SIL context. Don Davis, a translator in the South Pacific, noted that nationals did not respond to his initial efforts at conducting translation workshops. Upon reflection, he recognized that his teaching method was very analytical and abstract in contrast to the men's preference to learn the concrete, practical 'how to's'. When he changed his methods the response of nationals and their ability to learn the skill of Bible translation also changed (Davis 1985).

Having related learning styles to the general educational environment I will now consider their significance in relation to world literacy. Lingenfelter and Gray note that 'people who respond slowly as a whole to reading may be dealing with a cultural barrier' and they conclude that planning for a language program should include 'an evaluation of the type of thinking rewarded by the culture' (1981:11).

IV. Evaluating Learning Styles across Cultures

So then, given that the learning style of the student needs to be matched with the teaching style of the teacher, institution and teaching method, how can this match be achieved when designing a literacy program? Obviously, an evaluative instrument must be devised. However, I have not found a comprehensive or widely applicable instrument. To fill this gap I propose a broad application of Dunn and Dunn's twenty-one elements of learning style in order to subjectively evaluate the learner, teacher, teaching environment (this includes the institution) and the method of teaching reading.

Following is a proposed evaluation procedure:

1. STEP ONE - Evaluate yourself.

a) Apply each of the Dunns' twenty-one elements of learning style to yourself as a learner to determine your own learning style. Ask: Do I prefer quiet or noise, bright light or dim? How does temperature affect my ability and desire to concentrate? Am I more comfortable in a relaxed, or formal, learning environment? How am I motivated? How persistent am I? Do I follow through on difficult tasks and am I reliable in getting the job done? Etc. How important are these factors to me on a scale of one to ten?

b) Administer Mayers' test for identifying cultural values as they pertain to you.

c) Combine all these factors into a single column list.

2. STEP TWO - Evaluate your students.

a) Watch people in the community to determine generalizations you can make about them and their culture. Ask the same questions about these people that you asked about yourself. Pay special attention to situations where transfer of skills or information is taking place. These are culturally appropriate learning situations.

b) Try to identify which of Mayers' basic values best describe this culture.

c) Combine all these factors into a single column list on a separate piece of paper from the list that describes you. List the factors that describe the people and their culture in the same order that you listed the factors that describe you.

d) Place the two lists side by side so that you can compare them line by line. Note where there are similarities between yourself and

the people. Enjoy the similarities; they'll make teaching easier. Note where there are contrasts; this is where you need to be sensitive to the students' preferred learning style. You will probably need to make some changes in these areas or at least develop flexibility.

3. STEP THREE - Evaluate the learning environment.

a) If there is an existing institution within which you need to work, evaluate it according to the elements that apply. Leave spaces for the items that do not apply, so that this list can be compared with the previous two lists.

b) Make note of elements that cannot be changed due to matters outside of your control. These are factors that you and the students will have to accommodate to. Also make note of elements that are not consistent with the student's learning style but can possibly be changed.

4. STEP FOUR - Evaluate the reading method.

a) Use the following chart to note the primary perceptual and psychological avenues used by each reading method widely used in nonwestern societies. Find the reading method that makes the best match with the people's preferred perceptual and psychological orientation.

Learning Style[2] Element	Laubach	Gudschinsky	Multistrat.	Freire	LEA[3]
Perceptual Strength:					
auditory	X	?	X	X	
visual	X	X	X	X	X
tactile		X	?		
kinesthetic			X	X	
Cognitive Strength:					
analytical	X	X	X		
global		?	X	X	X

V. Unanswered Questions

As I stated at the beginning of this paper, there is a lot of literature that relates to learning and culture. The scope of this paper has been limited to integrating the different perspectives of learning styles. Several areas have remained untouched. For

example, I am curious to know how the concept of brain hemisphere dominance fits into this scheme. Carbo, Dunn and Dunn report research that indicates that a high percentage of poor readers are right- hemisphere preferenced (1986:20). In addition, I would like to try out my evaluation procedures to test their reliability and improve on the methodology.

VI. Conclusion

This paper has outlined a global view of the field of cultural learning styles. The search for a universal definition of intellectual ability (intelligence) leads in two unsatisfying directions. It seems that a culturally unbiased definition of intelligence defies universal application. However, researchers have identified many elements that affect how a person learns. These elements can be grouped on the basis of their relation to cognition, perception and culture. The study of learning style has application in any environment where teaching/learning takes place, but it is especially helpful to those training across cultures. By considering the inherent learning style of his students, himself, the teaching environment and the teaching method, the teacher can be more effective.

Notes:

[1]I have included brain hemisphere dominance in the chart of cognitive learning styles for the sake of comparison. I have read only secondary sources on this subject, so placement is tentative.

[2]For analysis of the reading methods on the basis of learning style I used the following resources: Carbo et al 1986; Gudschinsky 1973; Laubach 1957; Mayers 1979; Peet 1980; Stringer and Faraclas 1987.

[3]Language Experience Approach

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LEFT OR RIGHT BRAIN: IS THERE A NEUROLOGICAL RELATIONSHIP TO TRADITIONAL ABORIGINAL LEARNING STYLES?

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I. Introduction
II. The Left-Right Brain Model
III. The Left-Right Brain Model and Aboriginal Learning Styles
IV. Right-mode Thinking and Cognitive Research
V. Areas Needing Further Investigation
VI. Bibliography

I. Introduction

One day I was discussing with one of my Aboriginal friends the differences between 'western' and 'Aboriginal' world view--we were planning to write a paper together. When I explained some of the ways we westerners think she exclaimed in amazement, 'Do you really think like that?' It was good to understand each other better because what we know, how we know it and why we believe it are very different in the two cultures.

The purpose of this paper is to look at these differences from one perspective--that of the organization of the human brain and the very different ways of thinking used by each hemisphere in it.

II. The Left-Right Brain Model

In the past twenty years, the description of the brain's activity in terms of right hemisphere and left hemisphere has become well known. From medical records of people suffering brain damage, it was observed that loss of speech capability occurred more frequently

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when damage was to the left hemisphere than it did when the damage was to the right hemisphere.

Extensive research has since been done, especially on patients who have had the corpus callosum, the linking nerve connection between the two hemispheres, severed in cases of intractable epilepsy. Experiments with these 'split brain' patients have shown that the left hemisphere perceives in a different way from the right one, and each hemisphere processes data in its own way. When the corpus callosum is intact, information is passed across this link and 'unified'; thus a person is not normally aware that different parts of his brain may be functioning differently.

There is disagreement among researchers as to how distinct the two hemispheres are in their functions, and much is still not known about individual variation in brain organization. It is important to remember that no brain activity is completely centered in one hemisphere but that one hemisphere has primary control 'and that whatever contribution the opposite hemisphere may make is secondary, or minor, or perhaps that it is crude, weak, or even inhibited or suppressed by the role played by the primary hemisphere in the action or function in question' (Thompson 1984:101).

I became interested in the relationship between the left and right brain while attending language learning seminars given by Tom and Betty Brewster in 1985. One of their insights was that successful language learning is a right-brain activity because it is a social rather than an academic and analytical activity. (See Brewster and Brewster 1981.) It is the experience of many people that they have learned a lot about another language without being able to speak it; this is left-mode learning. There are others who speak a language accurately without being able to explain anything about the grammar; these are right-mode learners. In language learning, one or the other of these modes of learning is usually to the fore. Many 'westerners' or 'whites' learn languages mostly by the left mode and as a result don't usually become really fluent. On the other hand, many of my Aboriginal friends speak a number of languages well--and have never analyzed a single word. The Brewsters also pointed out that most of us in western cultures are dominated by the learning style of the left brain and therefore find any right-brain activities difficult, particularly in adulthood. My observation of Aboriginal people I know shows that many of them are dominated by right-mode thinking and as a result find left-mode activities more difficult.

During the seminars the Brewsters quoted and used examples from a book by Betty Edwards, *Drawing on the Right Side of the Brain*. Edwards cites evidence from neurological work with 'split-brain' patients and states: 'We now know that despite our normal feelings that we are one person--a single being--our brains are double, each half with its own way of knowing, its own way of perceiving external reality. In a manner of speaking, each of us has two minds, two consciences, mediated and integrated by the connecting cable of nerve fibres between the hemispheres' (1979:31).

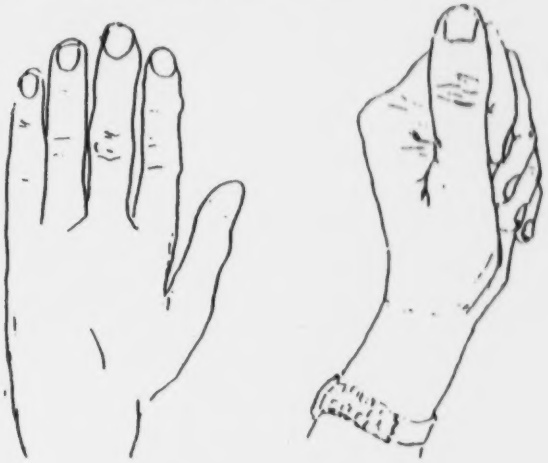
Edwards also gives some interesting descriptions about the way the two halves of the brain function (1979:32):

> Sometimes they cooperate, each half taking on the particular part of the task that is suited to its mode of information processing. At other times the hemispheres can work singly, with one half 'on' and the other half more or less 'off'. It seems also that the hemispheres may also conflict, one half attempting to do what the other half 'knows' it can do better. Furthermore, it may be that each hemisphere has a way of keeping knowledge from the other hemisphere. It may be, as the saying goes, that the right hand truly does not know what the left hand is doing.

Edwards relates these descriptions of the brain hemispheres to the process of learning how to draw. She explains that it is the right hemisphere that needs to process the information for a person to be able to perceive an object in a manner that allows its accurate reproduction. The left hemisphere's mode of knowing what to draw seems to interfere with the visual perception needed to draw well. The left mode imposes symbolic and verbal input with disastrous results. That is, it 'knows' the symbol for drawing a particular object and is impatient with the right mode's slow, deliberate observation. It tries to speed up the drawing process by imposing the more symbolic form.

I followed Edwards' instructions for making the shift from the left mode to the right mode in drawing. These instructions include drawing reverse images, copying line drawings upside down, and drawing behind your back while carefully observing an object such as your own hand. As I did these exercises, I was amazed at the depth of perspective and the detail I could see as I made the shift. I also experienced a sense of timelessness as I became engrossed in my

drawing. To give an idea of the results that can be obtained, which Edwards links to the shift from left to right brain activity, I have included my own initial drawing of my hand, then the hand drawn a few days later, after following the instructions. Although the latter hand drawing is in a more complex position, there is an obvious difference in the quality of the two drawings.



III. The Left-Right Brain Model and Aboriginal Learning Styles

My above-related experience in drawing, added to my previous experiences in language learning, increased my interest in the theory of left brain and right brain differences. Edwards' book includes a table comparing the characteristics of left and right brain activities. As I read these comparisons, I found they related to another area of my experience, that of living and working with Aboriginal people, primarily the Wik-Mungkan people of Aurukun, North Queensland. Edwards' table of comparisons is reproduced below. I will look at the comparisons (two of which I have modified) in terms of the differences in Aboriginal and western ways of knowing and ways of learning, illustrating with examples from my own or others' experiences and citing linguistic and other findings regarding Aboriginal learning styles.

A Comparison of Left-Mode and Right-Mode Characteristics

L – Mode	R – Mode
Verbal: Using words to name, describe, define.	**Nonverbal**: Awareness of things, but minimal connection with words.
Analytic: Figuring things out step-by-step and part-by-part.	**Synthetic**: Putting things together to form wholes.
Symbolic: Using a symbol to *stand for* something. For example, the drawn form stands for *eye*, the sign + stands for the process of addition.	**Concrete**: Relating to things as they are, at the present moment.
Abstract: Taking out a small bit of information and using it to represent the whole thing.	**Analogic**: Seeing likenesses between things; understanding metaphoric relationships.
Temporal: Keeping track of time, sequencing one thing after another; doing first things first, second things second, etc.	**Nontemporal**: Without a sense of time.
Rational: Drawing conclusions based on *reason* and *facts*.	**Nonrational**: Not requiring a basis of reason or facts; willingness to suspend judgment.
Digital: Using numbers as in counting.	**Spatial**: Seeing where things are in relation to other things, and how parts go together to form a whole.
Logical: Drawing conclusions based on logic: one thing following another in logical order – for example, a mathematical theorem or a well-stated argument.	**Intuitive**: Making leaps of insight, often based on incomplete patterns, hunches, feelings, or visual images.
Linear: Thinking in terms of linked ideas, one thought directly following another, often leading to a convergent conclusion.	**Holistic**: Seeing whole things all at once; perceiving the overall patterns and structures, often leading to divergent conclusions.

1. Verbal vs nonverbal

While trying to help a small Wik-Mungkan child put on a pair of sandals, I was continually verbalizing instructions to her. Her grandmother protested, insisting that she was 'just a child' and that it was useless telling her what to do. She was *kon-thaa'-way yippak* 'ear-mouth-bad still' which means 'unable to learn'. Young people may be referred to this way

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even up to the age of puberty when they are expected to take learning seriously as in initiation.

Aboriginal learning style has been well documented by Harris (1980) and Christie (1984). Aboriginal children learn by observation and trial and error copying. The child learns if and when he wants to, without coercion. This learning style, in which the child is aware, often keenly so, of all that is going on, is not accompanied by verbalization by the adult being observed, and frequently the learner asks no questions. Graham (1980) and Harris (1984) both make repeated statements of the need to teach Aboriginal children to verbalize if they are to succeed in western education. My experience with Wik-Mungkan adults has shown that much the same style is still used.

A woman I was helping to make a dress brought it back to me for fitting. It needed some alterations which I helped her prepare to make--but instead of taking it home and doing the alterations she threw the dress in the bin on the way out.

The teenage boys did the same thing with woodwork at the Trade School as soon as they made a mistake. The teacher and I were equally surprised by these actions, but at that time we were not aware of the traditional way of learning. We didn't know that a person would make an item up to when he marred it and then begin again on a new one--until he could perfect it in one go. There was no place for practicing or patching-up on the way. It was a long time before I understood the woman's actions. She had marred the dress and needed to start again.

I heard recently of an Aboriginal man who had carefully observed the pilot of a small plane. One day, to the pilot's surprise, the man took the plane and flew it himself. On a less dramatic scale, learning to drive a vehicle or learning to run an outboard motor, or even use the duplicator, are all done the same way.

The problem with learning this way is that all the contingencies may not have been observed--such as how to change from one fuel tank to the other when flying a plane. Oral instruction can handle this sort of information. For example, 'If the left fuel tank gets low, switch it over to the right one like this'.

2. Analytic vs synthetic

> An Aboriginal man in the Western Desert was ill and had wandered away from the camp and become lost. He was of the kangaroo totem. Others in the community were told not to shoot kangaroos as 'it could be our brother'.

The Aboriginal system of totems is a synthetic view of the world. The traditional Aboriginal sees unity or synthesis in the totem, of which he is just one of the representations. Other representations are the animal, the sacred site, the songs and body painting associated with the ceremony. The Aboriginal does not question how this can be true; he accepts what he has been taught such as that there is a 'synthesis' or 'unity' of things--even animate and inanimate. He performs the ceremonies the traditional way because 'that's the way we do it'. He does not analyze what he has been told, nor does he attempt to rationalize his beliefs. Many times when I was told 'that's the way we do it' I thought people were not telling me the 'real' reason. It took me a long time to realize that such a statement was a real reason. 'The way things are' does not need analysis, proof or comment.

In some Aboriginal myths the language shows that the man and the animals are seen as the same. For example, complex subjects are used such as 'the man, the flying fox, he....' The storyline is lost for the westerner when this type of construction occurs, as in Wik-Mungkan. Graber (1987:210-211) has an example of the same phenomenon in Kriol, a recent contact language.

3. Symbolic vs concrete

Aboriginal art is considered by westerners to be symbolic. However, the Aboriginal artist describes his work in such statements as: 'The circles are _____', 'the dots are _____'. While these metaphorical statements can reflect symbolic relationships, in the Aboriginal mind there is also a sense in which these symbols are understood not just as representations but as the actual things themselves. Therefore, his art is concrete as it relates to 'things as they are'. Though this 'concrete' view is not understood by most westerners, yet it is akin to the viewpoint of those in churches where the bread and wine of communion or mass are believed to become the actual body and blood of Christ. For other Christians, the bread and wine are only symbols of the body and blood. (See Bain

1979:259-287 for a detailed discussion of 'unity' in Aboriginal thought.)

4. Abstract vs concrete[1]

> I called out to a child taking my bike, 'Don't take my bike. Taking bikes is wrong'. Instantly an Aboriginal woman called to the child, 'Don't take Barbara's bike; she gets mad'.
>
> The young Aboriginal twins would not go with their mother. Her verbal attempts to persuade them failed. Then their uncle covered himself with a sail and approached the twins. They ran to their mother screaming 'ghost, ghost!'. His concrete and frightening approach had worked very well.

Both of these examples illustrate concrete approaches to problems. My response to the 'borrowing' of my bike was a typical western one using abstract moral principles. I had taken one incident and related it to 'taking' bikes in general. The Aboriginal woman perceived the same situation in terms of that particular incident alone. She assumed taking my bike would make me angry so warned the child appropriately. Abstract thinking allows for generalizations like my one about 'taking bikes'. Concrete thinking is tied to the actual incident which makes it difficult to generalize. In the second example, the 'realness' of the 'ghost' was more effective than verbal arguments or threats.

5. Temporal vs nontemporal

> A staff member was concerned that the church bell had not been rung for the service one damp overcast morning. When she couldn't find anyone to ring it, she did it herself. After waiting impatiently for the people to come, she went ahead and started the service. The people were upset, and wondered why she started without them. Of course everyone would sleep late on such a dark morning and the service would just start later. They would have rung the bell when they were ready; that was no problem.

When I am working alone, I as a westerner keep time and live by the clock. When I am working with Aboriginal people I try to be more flexible. Because Aboriginal people place little value on time, many westerners with whom they interact become frustrated. In

Aboriginal culture, actually doing the thing, such as the church service, is far more important than doing it at a particular time. Aboriginal people often do not know how to interpret a white person's rush to do things and may link it with 'being greedy' or seeking monetary reward.

6. Reasoning from possibility vs reasoning from fact[2]

> An Aboriginal man was taking a vehicle over the river for cattle work. The white mechanic said to him, 'If the oil is low, pour some more in'. The Aboriginal man took this as a statement of fact: 'The oil is low. Pour more in'. He did what he thought he was told to do daily for a few days, seemingly without question, until the oil was used up and then came back to the very surprised mechanic for more oil. This Aboriginal man learned to understand this kind of instruction later on.

The problem here is twofold. One problem is that of a very different world view, particularly about the things that could happen in the future. The other problem is a linguistic one.

Aboriginal people talk about what they are going to do in terms of facts--and they need to know that it is a fact. They also reason from things they believe are facts--but which others might not--such as myths. They also talk about things that have happened or might happen from revelations such as dreams. And dreams are a major source for reasoning. Four months of living with two Wik-Mungkan women at a workshop in Papua New Guinea in 1970 taught me the importance of dreams.

Westerners seldom take dreams seriously and so discount a valid source of Aboriginal knowledge. As well as this, westerners do something that many Wik-Mungkan people find hard to understand. They reason from mere ideas. This is why the mechanic and the Aboriginal man had such a problem talking about putting oil in the engine.

Firstly, the mechanic gave an instruction assuming something needed to be checked before any action was taken--but he did not say it. He had two ideas in his head. 1) Maybe the oil would be okay. 2) Maybe the oil would be low. But he didn't know which the Aboriginal man would find when he looked. The second problem was that he gave only one of the two alternatives. What the Aboriginal

man needed to do was to look so that he could decide which alternative to act on. What he did should have been based on what he found out when checking out the two ideas or possibilities.

However, the man did the only thing he knew to do. He took the one thing that was said and assumed it was a fact and then he did what he understood was a direct instruction. He misinterpreted what was said as 'The oil is low--pour some in'.

Once Aboriginal people understand how we westerners reason--and many do--they often borrow the English word **if** and use it to introduce a future conditional: 'If _____ then _____'. The Wik-Mungkan language does have a form that can be used for future conditionals, but past conditionals are more often used because they are based on known facts. The following are two examples taken from Wik-Mungkan texts:

Had he come, I'd have gone.

Had they been husband and wife, I'd have killed the man and kept the woman as my wife.

Both of these conditional sentences imply facts known to the speaker. The first implies **he didn't come**--that's why I didn't go. In the second, the implication is that **the two were not husband and wife**--so he couldn't kill the husband.

The difference between reasoning from facts with implications and reasoning from ideas where nothing is implied is a major one. The misunderstanding of the second type of conditional has caused many communication breakdowns between Aboriginal and white people.

I have tried various ways of presenting the nothing-implied conditional statements in Wik-Mungkan, including such a full statement as , 'Maybe he will come, maybe he won't come. (If) he comes, I will go. (If) he doesn't come, I won't go.' This statement can be understood as a conditional by the more sophisticated and educated, but it still causes problems for others.

7. Digital vs spatial

When an Aboriginal stockman asked me to buy him a pair of boots in Cairns, I asked for his size. He didn't know what

shoe sizes were so couldn't tell me. Another Aboriginal could have bought the man the right sized boots without any problem, but I couldn't.

The same Aboriginal stockman was reporting some missing cattle. When asked how many, he responded, 'Maybe twenty, maybe two hundred'. This man didn't think in terms of numbers but was able to tell which cattle were missing and give further details a white stockman couldn't--which was very helpful in the situation.

Aboriginal people shop with great success by using spatial perception, rather than memorizing number sizes. I was given a dress by an Aboriginal friend who had looked at the dress and related it to her knowledge of what I looked like. She didn't know or care about my 'size', but the dress fitted perfectly.

As the example about cattle illustrates, in traditional Aboriginal culture, items were seen individually, as unique entities, and therefore generalizations were not easily made. The introduction of mass-produced items has enabled some Aboriginal people to generalize about, for example, boxes of matches or packets of tea. Once this is done, numbers can be abstracted and the concept of numbering understood (see Sayers 1982 and 1983).

Pam Harris (1980) and Mary Laughren (1978) have documented the Aboriginal child's superiority in handling directional and spatial material at an early age. These skills can be used in an Aboriginal community to show how clever a child is in much the same way as a European child's skill in counting is used. Graham (1984) also carefully documents the Aboriginal child's skills in meaningful classification and extensive understanding of spatial relationships.

8. Logical vs intuitive

The hospital window was broken and I wondered who had done it. A passerby looked at the window and not only told me which child had broken it, but also that he had been running when he threw the rock. It was interesting to me that the women always examined a new baby's feet and were very quick to point out likenesses to family members. On one occasion they used this method to establish a child's paternity.

> I stopped to look at a snake track across the road. 'Where did the snake go?', I asked. 'That way', was the response. 'How do you know?' The answer was, 'See, see'.

The Aboriginal's perceptual skills are well recognized, particularly in tracking when it appears he gets his clues from incomplete patterns. He does not explain how he knows by logical deduction but simply by telling the observer to 'look'. I can 'look' but I don't recognize what I'm supposed to see.

There are examples from linguistics which show the minimal use of logical connection in Aboriginal languages (Hudson 1970, Marsh 1970, Sayers 1976, 1986). Argumentation is often by a statement of fact followed by observations about it or comments upon it. No overt conclusion is given. The observations about the statement are frequently given in the form of binary statements or the opposition of one idea with another such as the following positive/negative ones: 'It's not big; it's very small', or 'It's not only for one; they share it with everybody'. Logical conjunctions are not just absent, there is no place in such constructions for them. Logical conjunctions may string together a whole series of points rather than just opposing two.

9. Linear vs holistic

> A man looked at a tree, said it had water in it, chopped into it and the water ran out. His explanation as to how he knew water was there was 'Look and see'. A young man tried the same procedure on another tree without success. The older man simply explained again by 'look and see', which in western terms would mean 'learn by observation'.

I would have had the same problem as the Aboriginal young man in this example, cited in Huttar (1977:24). I don't know how the older man knew there was water in one tree but not in another. I would have needed logical explanation with specific signs to observe which would lead me step by step to the conclusion--a kind of cause and effect chain. But the experienced Aboriginal man saw the situation in a holistic way, recognizing the overall picture and coming to the right conclusion. Many of us non-Aborigines have been amazed by such perceptual skills. However, in driving a car, and in many other areas of daily life we all operate on the basis of perception. For example, I don't need to understand anything about physics to know when to turn the wheel, take my foot off the accelerator or apply the brakes

when turning into a narrow drive. And I can quickly adjust from one sized car to another. A logical or linear-thinking approach to learning many such skills would be counterproductive and 'illogical'.

Many more examples, both personal and from the literature, could be given of the differences in Aboriginal and western learning styles. My point is to relate Aboriginal styles of thinking and learning to the hemispheric view of the brain. It seems clear to me that Aboriginal people use predominantly right-mode thinking. This in no way implies any lack of intelligence. Both hemispheres of the brain are capable of marvellous things, but 'the right hemisphere is not under very good verbal control and is not used for making logical propositions' (Edwards 1979:36).

IV. Right-mode Thinking and Cognitive Research

Looking at the chart Edwards has provided and relating the features of thinking of each mode to what some psychologists say, it seems to me that the features of the left mode characterize what is usually called by psychologists the Formal-Operational mode of cognition. The features of the right mode of thinking relate much more to the Concrete-Operational mode as well as to some aspects of Pre-Operational thought.

The basis for reasoning in traditional Aboriginal culture stems from his world view and his dependence on known and experienced facts. The traditional Aboriginal person had little need to use operational thought, or the left mode of thinking. This does not mean that he was unable to develop it, but it says that his background simply did not require it. To achieve the shift to the left mode the Aboriginal has to stop relying on perception, known and experienced facts and revelations as the only bases for reasoning. Once he is able to do this, he can reason from facts and from ideas as well. In this way left-mode thinking, or formal operational thought, can be used. Many Aboriginal people have become left-mode thinkers and use this mode when appropriate.

V. Areas Needing Further Investigation

As I have struggled to shift into the right-mode of thinking so that my perceptual skills are increased and I can 'see' well enough to draw well, I wonder what can be done to help Aboriginal people develop skills associated with left-mode thinking.

A number of ideas come to mind. The first is teaching to hypothesize from real-life experiences--in preference to a formal classroom situation which may not be perceived as 'real'. For example, the experience of the outboard motor running out of fuel today, or some other real experience the people have had and the problems it caused, could be talked about in terms of how it could have been avoided. Then questions could be developed to talk about the possibility of the same thing happening tomorrow. From one real life event many other situations could be talked about the same way. The ideas expressed in conditional sentences need to be talked about until it is clear they are just ideas and not facts. For example, when I say, 'If I go to Cairns next week...', I need to make it clear that I might go and I might not, and that I don't know yet. It is only after this is clear that I can move on to the alternatives I want to offer if I go.

Another area I feel needs careful examination is the language used to a child by the mother or other child caretaker in the early days of the child's development--both before he learns to speak and as he does. I believe some significant differences would emerge when, for example, comparing the language used by a white/westerner mother to her child and an Aboriginal mother to hers.

Immediately comes to mind my hearing an Aboriginal grandmother giving a small child detailed instructions about what to call various relatives and what they would call her. As well, the grandmother outlined obligations and appropriate behavior for the child to take. This kind of information is passed on to the child over and over again until she knows who is who and how she is expected to behave.

In contrast to this, in my family, I have observed the young mothers giving a lot of verbal instruction to their children but it's been quite different. It usually includes reasons why the child should behave the way the mother wants. For example, 'If you go outside without your shoes you'll get a cold'. 'If you want me to take you shopping this afternoon, pick up your toys.' 'Why don't you go out to Grandma in the kitchen. She might have something for you.'

Some detailed 'diary' studies of real Aboriginal situations would be very helpful. As well as learning how to talk, the child learns what is appropriate to say. The Aboriginal child learns about kin, the white child to question everything, 'Why, Mummy, why?'.

My hypothesis is that many white children are born into an environment where left-mode thinking is used in interaction with them--long before they can use that sort of language themselves. I continue to hypothesize that many Aboriginal children are born into an environment where primary focus is on 'who's who' and how to behave--in a real life situation, not a hypothetical one.

Notes:

[1]In this section I have chosen to compare Abstract and Concrete. Here I have taken Abstract to mean a more general principle extracted from an event and Concrete to apply to a real life event.

[2]I have chosen to compare 'Reasoning from possibility versus Reasoning from fact' because I believe this best describes the difference between western and Aboriginal thinking processes.

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TEACHING READING TO ABORIGINAL ADULTS FROM TRADITIONAL COMMUNITIES

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I. Introduction
II. What Adult Literacy Teachers Need to Know about their Aboriginal Students
III. Problems Aboriginal Adults May Face in Developing Meaning Making Literacy Skills
IV. What Strategies Should Be Used in Teaching Literacy to Aboriginal Adults
V. Conclusion
VI. References

I. Introduction

The ability to read and write is an important value for middle class white Australians like myself. To be able to read is considered 'natural'. There may even be a tendency to think there is something unnatural or strange about someone who can't read and write. Schools teach a subject, 'reading', giving it prominence as a skill of great value. Australian Aboriginal societies, on the other hand, were traditionally oral communicators. One might think that the long contact with white society has changed Aborigines, causing them to value the ability to communicate in writing. However, even where little traditional culture seems to remain, Aborigines still rely mainly on oral language for interpersonal and intercommunity communication. A study by Fesl (1982) among the Aborigines of three communities in Victoria and New South Wales showed that these relatively nontraditional groups had 'little or no interest in literacy tuition' (p. 48) and that 'literacy ability...has little value as a

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skill in Aboriginal society'. The most important needs of Aboriginal people which center on relationships with kinsfolk, their land and the world of the spirit, are met, as they always have been, through oral communication.

It is not surprising, then, that in more traditional Aboriginal communities, where the people have come in contact with literacy only much more recently, there is not a general interest in learning to read and write. In some communities, however, there are those who express an interest in learning to communicate through text. Some are aware of the ongoing culture loss being experienced by their people and are interested in documenting history and stories before they are lost. Some are, or want to become, teachers in community education programs. For this work they need to be able to read, sometimes both in their vernacular as well as in English. Some of these folk also want to be able to study so that they can gain full teaching credentials. Others are interested in studying the Bible in their own language or in English. Still others, increasingly aware that literacy is important for political reasons, want to be able to deal with those outside their culture--politicians, government officials and non-Aboriginal community workers. These Aborigines want to gain information from letters, news reports and documents, and to be able to respond in writing to outsiders. So there is, as I observe it, a small but growing group interest in literacy. This means that more and more teacher linguists, adult educators, tutors and others are responsible for providing reading instruction for Aboriginal adults in communities where much of traditional culture and language still remains. What is more, these individuals requesting instruction will not be satisfied with the very basic literacy ability generally present in most remote communities. They are wanting literacy to be a tool they can use for their own and their people's ends.

This paper first tries to summarize some of the things that instructors will need to know about their Aboriginal students in order to effectively help them to develop the purposeful literacy skills they are seeking. Secondly, the likely problems Aboriginal students may face in becoming literate are examined. The final section of the paper outlines the reading teaching strategies and activities that will help traditionally orientated Aboriginal adults to learn to use literacy purposefully.

II. What Adult Literacy Teachers Need to Know about Their Aboriginal Students

In recent years there has been quite a lot of research that has looked at educationally significant differences between Aborigines and non-Aborigines. Work has focussed on the Aboriginal view of reality (Bain 1979), cognitive development (Dasen 1973, 1975; Seagrim and Lendon 1976, 1980; Klich and Davidson 1984), learning styles and modes of learning behavior (Davidson 1977; Harris 1977, 1980, 1982a, 1982b, 1984; Christie 1980, 1982a, 1982b, 1983, 1984a, 1984b, 1985). There have also been attempts to develop literature based on the prior knowledge and interests of Aboriginal people (Russo 1981; Russo and Harris 1982; Nicholls 1984) and to emphasize the functional aspects of reading, and other areas of classroom learning (Davidson 1983; Christie 1982a, 1983; Harris 1984). Most of this work has been with children, although some writers have attempted to apply findings to work with Aboriginal adults (McGrath 1983).

1. Aborigines have a way of looking at the world that is radically different from non-Aborigines.

Aboriginal and non-Aboriginal people view the world differently, and it is reasonable to assume that these differences need to be understood in any attempts to introduce to Aboriginal people the new skills of literacy. According to Margaret Bain (1979:372-392), Aboriginal people and white people are brought up through childhood to use mental processes, language and language structures in ways that are very different. These differences mean that Aboriginal people and white people think about and talk about the world from quite different perspectives (Seagrim and Lendon 1980:181-213). The basic difference between the two world views is that the non-Aboriginal sees the world in terms of impersonal, objective and quantifiable *transactions*, while the Aboriginal sees it in terms of relationships. Bain (1979:374) lists several important points about these two very different ways of looking at the world which are summarized below.

> Firstly, the white man sees his world as consisting of things logically related by impersonal causes and effects. The Aboriginal on the other hand sees the things in his world are as related to eternal spiritual persons such as, for example, crow or kangaroo. So, says Bain, when an Aboriginal man says that a particular area of land is his mother, he is speaking literally and in a way quite inaccessible to the western mind.

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> Secondly, the notion of more or less, that is, of quantity and the quantifiable, is not only irrelevant but contrary to the Aboriginal view of the world.
>
> Thirdly, for the Aboriginal person, social interaction is not bound by the present historical moment. Creative ancestors, totemic beings and deceased relatives are all present, although mostly unseen, among those who can be seen not only in ceremonies but also in everyday life.
>
> Fourthly, for an Aboriginal, much of what goes on in the seen world can be explained in terms of interaction between people and the unseen world. This view of reality enables the Aboriginal person to explain the transcendent but is so different from the white person's way of looking at the world that when the two come together they totally misunderstand each other. In the same way that the average whitefella's world view causes him to miss altogether much of what the Aboriginal person sees, so the Aboriginal person's perspective on life prevents him from understanding the physical world in logically and objectively related quantifiable units as the non-Aboriginal does.

In her research Bain explores the main ways that these differing world views clash (1979:387-392). Christie (1984:9) looks at three of her conclusions most relevant to the education setting. I have summarized these points below.

> Aboriginal persons' thinking is tied to their immediate experience and to their ways of putting things into categories. They have difficulty with hypothetical questions.
>
> The Aboriginal view of the world inhibits ideas of causation, number and conservation (the ability to understand that things that have changed in some ways, for example in shape, are still the same in other ways as they were before).
>
> The way of looking at the world which the Aboriginal has learnt makes it hard for him to build up in his mind the same kinds of ways of classifying or grouping things together that are very important in the early stage of the non-Aboriginals cognitive development.

2. The culture and language of both Aborigines and non-Aborigines shapes the way they do mental tasks.

The Swiss psychologist Piaget and other researchers have studied how children learn to classify objects according to their properties and how they learn to understand relationships between classes and subclasses of concrete objects (or objects tied closely to the concrete).

This stage of thinking is called 'concrete operational thinking'. A later stage of thinking, that of 'formal operational thinking', involves the ability to classify and work mentally with ideas that are imaginary, hypothetical and not tied to the concrete. Research with Aboriginal children and studies comparing their development with that of white children show that a large proportion of Aborigines do not learn either the concrete operational nor the formal operational ways of thinking. For these people these stages are not arrived at in childhood nor in adulthood. (Dasen 1973). Seagrim and Lendon (1980) conclude that this is because the different ways of thinking as described by Piaget are in fact taught to us by our culture, and that people don't usually say things in their languages or think in ways that don't fit in with what their culture has taught them. Because these stages of thinking are required in mathematics it seems that the introduction of numeracy is likely to threaten Aboriginal culture 'at its very roots' (Seagrim and Lendon 1980:212). Seagrim and Lendon comment that it does not seem that the development of literacy will produce such problems. However from other research, especially that of Michael Christie (1984), it seems that the development of a high degree of literacy skill could very well produce some very radical changes in Aboriginal mental processes.

3. Most Aboriginal learning is done informally in contrast to non-Aboriginal school learning.

From his research at Milingimbi, Stephen Harris (1977, 1980) described traditional ways Aborigines learn. Other studies from very different areas and among different groups support his findings (Harris 1984, Christie 1984b). These ways of learning are 'informal' in nature, and contrast markedly with those used in the 'formal' Western classroom. Each society, it seems, has its own ways of promoting learning that ensures effective living within that society. The Aboriginal ways are functional for the kinds of learning Aborigines traditionally needed to live effectively in their society. The five major ways Harris lists are summarized here.

> Learning by 'observation and imitation' rather than through verbal instruction, as most formal classroom learning is done. The bulk of Aboriginal learning--survival skills, social skills, art, dance, music--is best done this way.

> Learning by 'personal trial and error' rather than through verbal instruction and demonstration. Aborigines learn by doing.

> Learning by 'real life performance' rather than by practice in contrived settings.
>
> Learning 'by wholes'. There is little focus on sequencing and learning parts of skills. Rather, there is a strong tendency to learn the whole. So, for example, the whole dance is performed. Mastery is accomplished 'by successive approximations of the efficient end product'.
>
> Problems are solved by 'persistence and repetition'. (Harris 1984:4-5)

The learning styles used in white society are in marked contrast to those outlined above. Even before they begin formal classroom learning, white children are taught by parents to respond to verbal instructions and to ask and answer questions. These kinds of learning behavior are part of the formal learning which they will encounter in the classroom. Formal learning has been described by various researchers (Scribner and Cole 1973; Harris 1977, 1984; Christie 1982a, 1983, 1984b, 1986). According to these authors this kind of learning is

> 'Decontextualized' and has little to do with immediate everyday life and survival.
>
> 'Heavily dependent on words', both spoken and written, because it is largely learning out of the real-life context.
>
> 'Conscious', in that people doing it are mostly aware that they are involved in a learning task.
>
> Often carried out by the 'sequencing of parts of a skill or a body of knowledge', and learning them part by part until the whole is mastered.
>
> Often planned and supervised to some extent by a teacher.

Christie (1982a, 1983, 1984b, 1986) calls this kind of formal learning behavior 'purposeful learning'. He points out that purposeful learning requires

> A *goal* which is consciously and accurately identified by the learner before effective learning takes place. This is in contrast to informal learning where the learning is incidental and the goal is the performance of the activity. Christie discovered that Aboriginal children in a formal setting will often not see the learning goal. For them the goal may be 'to please the teacher' (Christie 1980) or 'to get

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a page full of ticks' or 'to go through the classroom activities as a kind of pleasant ritual'. They miss the real learning goals of these activities. (Christie 1983)

Judgement, helping the learner monitor his progress towards the known goal. Feedback, to ensure that he can do this, is provided in a formal learning environment. A student who has learned to monitor his own progress will be able to reflect on what he has learnt, acknowledge his errors and accept correction, and continue with further learning after initial success.

Internal or personal control. The formal learner willingly and consciously directs and regulates his or her own learning behavior. Frequently, according to Christie, Aboriginal students will wait passively, expecting the teacher to give them learning (1984b). When he questioned students about how to learn well, Christie got answers like 'sit down', 'listen to the teacher', 'be quiet'. His upbringing has not taught the Aboriginal student that he can make learning happen by trying and thinking.

III. Problems Aboriginal Adults May Face in Developing Meaning-Making Literacy Skills

1. Not knowing what reading is

Researchers and writers like Goodman (1975, 1976a, 1976b), Smith (1978, 1979) and Latham and Sloan (1979) view reading as a psycholinguistic process whereby a reader reconstructs as best he can from a visual code the writer's meaning. (A listener uses a similar process for deriving meaning from an oral code.) Language, according to these writers, has two levels: 'surface structure', that is, the sounds or written representation, and 'deep structure', that is, meaning. The two are related by a system of rules called syntax or grammar. The meaning (deep structure) of a written or spoken discourse (surface structure) is ascertained by the reader or hearer not only through sounds or graphic representations, but also from the way in which the words, sentences and larger units of language are related to each other by these rules. The rules of language use are learnt informally during childhood in the context of everyday experience (Cambourne 1984). The ability to recreate meaning from the spoken or written language code depends upon the ability to associate internalized concept or meaning schemes, 'the world in the head' as Smith (1978:79) calls it, developed through experience, with this visual code.

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According to Goodman (1976a), in effect, reading is a 'psycholinguistic guessing game', an active purposeful process in which the reader uses as much graphic information as he needs (how much will depend on how familiar the reader is with vocabulary, ideas and language patterns used), in combination with semantic and syntactic information, to decide what the writer means.

> "The efficient reader (like the efficient listener) engages in a process involving sampling, predicting, testing and confirming, thus relying on strategies that yield the most reliable prediction with the minimum use of information available." (Cairney 1982:32)

In their oral culture Aborigines have minimal exposure to literature and few models of reading. Those who have experienced reading instruction have often been taught by inappropriate methods. Few have learnt what real reading is. Many, as Christie suggests (1983), view it as a kind of meaningless school 'ritual'. It is essential that the strategies used to teach Aboriginal adults provide them, from the beginning, with an understanding of what reading really is. (Harris 1982a)

2. Culturally and linguistically unfamiliar reading materials.

Readers depend heavily on their own knowledge of the world as well as language when they are making meaning from text (Smith 1978:50-100; Pearson and Johnson 1978; Latham and Sloan 1979:26-52). This knowledge is largely determined by a person's cultural affiliation. Culturally and linguistically unfamiliar material will be more difficult to understand. At the base of such difficulties, in the case of non-Aboriginal authored material being used by Aborigines, lie not minor differences in detail but the radically different world views of the two societies. That these kinds of difficulties are experienced by Aboriginal readers has been demonstrated in several studies cited by Davidson (1983). Harris (1982a), while acknowledging this difficulty, points out that if people read only material that is culturally and linguistically familiar, they will never develop new schemata (mental systems developed by and used in learning) and be able to read and understand more widely. Some possible ways of dealing with the problems created by linguistically and culturally unfamiliar reading materials are discussed in the next section of this paper.

3. World view and learning styles.

A further problem traditional Aboriginal adults face when learning to read is that their culture socializes them to learn almost exclusively by informal means. Language and survival skills, knowledge about the bush and many other things are learnt without anyone ever consciously planning a program to teach these, and without the learner ever setting out to consciously learn them. It is not that these things just 'happen naturally'. In fact, Aboriginal society, from early childhood, puts social pressure on the individual to learn these functional skills (Harris 1984).

Similar pressures exist in whitefella society. Here social pressures ensure that white children learn the skills they need in order to function in their society. Much of this learning is done in informal ways similar to those used in Aboriginal society. However, the majority of white children also learn before they ever come to school, the foundations of the kind of purposeful formal learning that they will do when they go to school.

From Harris' (1982a, 1982b, 1984) and Christie's (1982a, 1983, 1984b, 1986) work it is clear that if Aboriginal adults are going to be able to read-to-learn they need in the process to learn-to-learn formally or as Christie puts it, 'purposefully'. Furthermore, it seems that these differences in learning styles are part of a complex of interrelated factors, including radically differing ways of viewing reality (Bain 1979) and difference in cognitive development (Seagrim and Lendon 1980), which together make up the fundamental differences between Aboriginal and non-Aboriginal people. If they are to learn to use literacy skills in meaningful ways, as some now seem to want, Aboriginal adults may need to be prepared to make some very real changes in the way they learn and think, and perhaps in the way they view the world.

4. Motivation and the ethical implications of learning to read purposefully.

The final problem to be singled out here is that of motivation. A fundamental prerequisite of learning to read is 'wanting to read' (Sloan and Latham 1981:50). This paper began by pointing out that 'literacy ability...has little value as a skill in Aboriginal society'. Beside this, some writers have indicated that Aborigines, for example the Aranda (Seagrim and Lendon 1980:211) and the Pitjantjatjara (Snowden 1981), have resisted formal schooling because they,

consciously or perhaps subconsciously, sense that if they or their families take part in it seriously it will change them radically. For this reason there seems little point in mounting large-scale adult literacy programs. Those who have a purpose for learning to read (Christie 1986) should be the ones with whom adult literacy workers focus their attention. If, however, becoming purposefully literate as distinct from being 'ritual readers' is likely to result in some profound changes in the fundamental thinking and learning processes of Aborigines, and there is much evidence that it will, are there not some ethical issues to be worked through before teachers embark on such programs? Teachers need to be aware that they are not just teaching a skill, but are in fact catalysts of what could be profound change. It is vital that literacy workers develop a sensitivity to the reactions of those they are assisting in literacy learning. Aboriginal adults must not be coerced to learn to read and should be able to select materials they feel are appropriate and reject meaningless and offensive materials.

By far the best way to ensure culturally sensitive reading education, both for adult Aborigines and children, would be to train traditional Aboriginal people as teachers. Recently several writers have made this point and some teacher training institutions are trying to make it possible (Sherwood 1982; Harris, Graham and Buschenhofen 1984; Harris, Graham and Odling-Smee 1985). The difficulty of the task faced by these institutions and by trainee teachers should not be minimized. In order to be able to stimulate the development of meaningful literacy among their people, Aboriginal teachers will need to learn to think and to learn in ways that are quite foreign to them.

IV. What Strategies Should Be Used in Teaching Literacy to Aboriginal Adults

1. Some general principles

The foundational principle of all teaching applies, that is, 'begin where the learners are'. To ensure that students understand that reading is not a 'meaningless ritual', they need to begin learning to read in the language with which they are most familiar, using reading materials that reflect their culturally conditioned view of the world.

Right from the early lessons students should be using materials that are meaningful and related to their motivations for learning to read. Reading outside of the class context should be encouraged in

every possible way. As soon as possible students should choose their own materials. It is most likely that teachers will need to develop literature for their students, especially if the vernacular is being used. Even if English is used, the amount of material that fits the criteria above and is of real interest to the student will be very small. The nonexistence or scarcity of materials in any language continues to make the whole exercise of reading-to-learn unrealistic and unattainable until Aboriginal authorship is taken seriously. Finding ways to meet this enormous need requires immediate creative attention.

Wendell (1982: 19-20) discusses the need to develop indigenous authors to write for their people. She distinguishes four stages of reading difficulty (from most predictable to least predictable) according to the familiarity of author and student with the content:

1) Content completely familiar to both author and reader.
2) Content unfamiliar but experienced by the author.
3) Content unfamiliar experienced vicariously by author.
4) Content unfamiliar, translated from another language.

Aboriginal students should begin learning to read with Stage One material and gradually progress to Stage Four material.

The ideas in the material should be discussed and reflected upon with the student. In other words, the reading lesson should be a language experience rather than just a decoding lesson, although decoding is of course a prerequisite to interacting meaningfully with text. An important goal of the lesson will be to create a forum for using language, especially questioning, in such a way as to encourage the development of the kind of imaginative and hypothetical thinking students will need to develop if they are to read-to-learn.

Teachers will need constantly to model purposeful reading--for enjoyment, humor, current events, history, curiosity or whatever turns the student on. As students become more purposeful in their learning, it may help if teachers explain to students how they are teaching reading and the goals of each lesson.

Lessons should be conducted in a way that enables students right from the beginning to make continuous use of the primary meaning-making strategies (sampling, predicting, testing, confirming, correcting).

Writing, because it forces a student to take personal control, should be part of the curriculum from the very beginning. It is vital that this, too, be constantly modelled.

The object of any teaching/learning activity used should be finding meaning. Games that have winning as the object may distract students from the real goal of the activity.

Formal word study (phonics, spelling, punctuation and dictionary skills) and handwriting should not be taught during purposeful reading and creative writing lessons, but reserved as distinctly separate exercises. The teacher must ensure that only useful and applicable exercises are given. The student must understand that these exercises have a purpose, namely, to develop skills in independent problem solving. As the teacher explains and models their usefulness in meaningful literacy sessions, the usefulness of exercises should be readily apparent to the students. The importance of phonic (graphophonic) knowledge in learning to read and especially to write should not be underestimated. It is often a useful tool in the meaning-making process. The consistency of the phonemic orthographies of many Aboriginal languages makes the use of graphophonic information a less frustrating process than with English.

2. Teaching strategies for prereading and beginning stages.

Most nonliterate Aboriginal adults do not understand what reading is. Before they learn to read they must make the discovery that white children usually make while sitting on dad's knee and being read to, that is, 'Those marks on the page somehow represent meaningful language'. This understanding is fundamental. Without it students will ever be only 'ritual readers'. For this reason, beginning reading will best be taught using a combination of the Language Experience (LE), the Shared Book (SB) and the Neurological Impress strategies (NI). These teaching strategies most resemble the informal learning styles of Aborigines, so students will feel comfortable with them. All of these strategies focus on meaning rather than decoding and thus help students to find out right away what real reading is like. All of these strategies have the capacity, as students are ready for them, to begin development of purposeful learning, that is, to help students set learning goals, use feedback and exert personal control. In the white classroom these strategies build upon the purposeful learning behavior which students began to learn in their homes. In

the Aboriginal classroom they should be part of an intentionally structured climate in which purposeful learning can be added to the nonformal functional learning system of the Aboriginal. Teachers should therefore expect Aboriginal students to find these strategies useful for a much longer time than do non-Aboriginal students.

A. Language experience strategies

There are several variations of the LE strategy. These are explained in detail in, for example, Sloan and Latham's book 'Teaching Reading Is...' 1981: 89-123). The most significant strengths of this strategy are (pp. 91-92):

a) Students read their own natural language, based upon their own meaningful experiences.
b) There are no difficulties in predicting meaning or understanding concepts. The text is semantically and syntactically matched to each participant. The reading material in this case, according to Wendell's criteria, is the easiest of Stage One.
c) The approach can be used with individuals, groups and whole classes and it is economical because it requires no books.
d) It is suitable for all age groups.
e) It enables a sight vocabulary to be developed rapidly.
f) It can be used in conjunction with other strategies and provides an easy transition to the formal reading of books.

Basically the approach consists of the following steps: have an experience, discuss the experience (often built around an illustration or photograph), generate an oral text, the teacher and/or the student write text, the student reads the LE text (preceded as necessary by prompts from the teacher), question-answer with substantiation by the student from the text (a very important part of the strategy if students are to learn to search the text rather than the experience for meaning), development of a word bank leading to rapid acquisition of useful sight vocabulary, and finally the student sharing the story with others. There are numerous helpful variations on this strategy as given for example in Osmond (1984: 23-27) and Langlands (1985).

B. Shared book strategies

SB strategies described in detail by Holdaway (1979) and Sloan and Latham (1981: 113-116) involve the preparation of a book with highly predictable, often repetitive, text. In Aboriginal oral literature,

dream time legends, songs and many hunting stories have such structure. The group and teacher read the text several times. This is followed by a variety of oral cloze procedures where the group and/or individuals are asked to predict what comes next (the word or phrase covered). This encourages them to use their syntactical and semantic knowledge and develops primary meaning-making skills. Big books, overhead projectors, charts of the text which can be cut up and reassembled are all aids used with SB approaches. Questions and answers, with oral substantiations from the text as in LE, are also a vital aspect of this approach for developing student ability. The instructor models good questioning, by asking a variety of closed or open questions of the text. There are many variations of this strategy; for example see Osmond (1984: 34) and Langlands (1985).

C. Neurological impress method and related strategies

The NIM, lap or repeated reading strategy (Sparber 1979) is ideally a one student to one teacher approach but can also be used in groups with a teacher or using taped material. The strategy entails the student following out loud (echoing) the teacher's reading or a recorded oral reading of a text, while following the text. In this way the text is read through several times. Christie's article, 'Fluent reading in ten easy lessons' (1982), describes a variation of this approach using cassette recordings of books to help slow readers improve their reading skills and learn purposefully. With this approach, students can 'read' interesting, meaningful text immediately and sight vocabulary grows rapidly. NIM can be used from pre-reading through to fluent reading stages. Variations of NI using oral cloze and question-answer with substantiation from the text are helpful in developing purposeful learning.

3. Teaching strategies for developing independent reading-to-learn.

The strategies listed above contain some elements that begin to move students in the direction of purposeful independent reading-to-learn. The following strategies focus much more strongly on this. These strategies will be quite foreign and even offensive to the Aboriginal student, as they will 'force' him to learn and think in ways that he does not normally use in his culture and language.

A. Predicted substantiated silent discourse reading strategy (PSSDR)

This group strategy (Sloan and Latham 1981: 143-152) is similar to strategies described by Osmond (1985: 34-36) for use with non-

Aboriginal adults and to that used by Tharp (1981, 1982) and Au (1981) in Hawaii. A variation of PSSDR, called Individual Reading (IR) to be used with individuals, is also outlined by Sloan and Latham (1981: 163-168). All could be described as 'direct teaching of comprehension' strategies. In PSSDR a short text, one that can be read in five to ten minutes, is used. Students then anticipate the content of the text from title, illustrations, first sentence and/or paragraph. Their predictions are discussed. Students are then reminded of what to do if they come to an unknown word (guess, read around, substitute, leave out, insert nonsense word). Next the teacher asks an open discourse question, one that will aid the student in exploring the meaning of the whole discourse. The student then reads the whole text silently in order to answer the question. Unknown words are marked and may be worked on in word study sessions later. The discourse question is then discussed. All answers are received, correct or otherwise. Then, in the next step of the strategy a variety of other questions, both closed and open in nature, are asked. As many students as possible give oral answers and substantiate from the text by oral reading. Those students who miscue are helped to self-correct by hearing the other students give substantiations for their answers to the same questions. Dramatic oral reading of the text may then be undertaken. After this strategy is being effectively used the Re Quest strategy should be introduced.

B. Re Quest strategy (RQS)

This strategy is described by Lewis Larking (1984). Both students and teacher read a text silently. Students then ask questions of the teacher about the passage. The teacher then takes a turn at asking questions, being careful to provide good question models. A variety of question types can be introduced in this way. This strategy will help Aboriginal students to develop questioning behaviors which are not naturally part of their culture (Christie 1984) and to be able to relate to text in a questioning way.

C. Uninterrupted sustained silent reading (USSR)

This strategy requires students and teacher to choose their own books and read uninterrupted for periods of up to half an hour. In this strategy the teacher and other students provide models of silent, self-controlled purposeful reading. The strategy is difficult to implement unless there is a good selection of reading material available. (Christie 1983: 72; Sloan and Latham 1981: 31-36)

D. Discussion-aided analytical reading strategy (DAAR)

This strategy, described by Sloan and Latham (1981: 242-244), could be of use with, for example, Aboriginal teacher trainees studying texts or for group Bible studies. The strategy is identical to PSSDR except that following the discussion of the discourse question, students work from work sheets in small discussion groups. On the work sheets are several questions, say up to six, with spaces provided for writing out an answer. Students all read the same text and make notes of their answers to the questions. Answers are shared, substantiated from the text and discussed. Finally the group agrees upon an answer to each question together.

4. Reading study strategies.

There are several strategies described by Sloan and Latham (1981: 251-254) as individual study strategies, for example SQ3R (survey, question, read, write, review). These strategies like PSSDR and DAAR encourage students to predict meaning, question text, read for answers to questions, write answers and reconstruct meaning, now that input has been obtained from the text. SQ3R type strategies have limited use for Aborigines but students who wish to further their education may need to learn to use such strategies. There may also be ways of adapting this approach for Bible study with individual study leading on to group discussion and application of concepts learned.

Writers such as Holdaway (1979) and Sloan and Latham (1981) suggest numerous activities that may be helpful in teaching Aboriginal students to learn reading for meaning. The most useful of these would include

- sentence reconstruction
- sentence expansion
- many kinds of oral and written cloze activities
- information matching activities
- finding small words in larger ones
- many different kinds of Bingo and card games

V. Conclusion

Learning to read-to-learn is likely to have a profound effect on the way Aborigines see the world, learn and think. Modern approaches to teaching reading such as Language Experience, Shared Book and Neurological Impress Method may be effective tools in

beginning the process of teaching Aboriginal adults to read to learn. Other approaches of a more formal nature, like Predicted Substantiated Silent Discourse Reading and Discussion-Aided Analytical Reading, can continue this process. These will be effective with Aboriginal adults as they are with whites because they are essentially strategies developed to teach reading as a meaning-making process. Teachers of traditionally orientated Aboriginal adults need to understand, however, that as these strategies are used effectively with their students they will be doing far more than teaching reading. They will, in effect, be assisting students to reshape their learning styles.

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Reprinted by permission, from Learning My Way, in a special edition of Wikaru #16, at the Institute of Applied Aboriginal Studies, Western Australian College of Advanced Education, 1988, Perth, Western Australia.

The emblem for International Literacy Year was chosen from three hundred designs sent in from eighty-two countries, in a contest organized by the International Association of Arts. The winning motif was submitted by Mr. Kohichi Imakita, a Japanese graphic artist, who explains that the design represents humanity reading.

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THE MATTER OF LEARNING STYLES – TOO CRUCIAL TO BE PUT OFF ANY LONGER!

Alice Larsen

Alice Larsen has a Danish Teacher's Certificate. She attended Bible College for two years, took SIL training in England, joined SIL (the Summer Institute of Linguistics) in 1975. Since 1977 her husband, Iver, and she have worked in Africa. In 1981 they were assigned to the Sabaot language project in Kenya. They have four children.

I. First Experience
II. Thinking about the Problem
III. Talking about Learning Styles
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I. Our First Experience

They say that "Experience is the best teacher." It was through an experience with the Sabaot primers that I came to learn about different learning styles. We had made our literacy material in Sabaot in good Gudschinsky style, with the addition of comprehension drills,[1] and beginning with a series of global lessons.[2] Furthermore, we prepared stacks of supplementary material in the form of experience charts, alphabet cards, letter cards, and different games: shape-in-the-box, jigsaw, domino, lotto, and flash cards (see Mugele, 1975). The content of the primers was cultural, indigenous-authored stories. We kept all the rules about how many new characters and sight words to introduce per lesson, how often a built word should reappear in later lessons, etc.[3]

Sabaot is a Nilotic language which has closed syllables, lots of consonant clusters, twenty-eight vowels, advanced tongue root, vowel harmony and grammatical tone. All words are rather long, and a natural sentence is also quite long. As one of the literacy teachers expressed it, "If you start writing here on the blackboard, you cannot finish the whole sentence until you have gone out into the street!" So writing a primer series for such a language was a challenge.

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But one thing we had not considered. Although we had produced the trial primers in cooperation with the Adult Education Department of the Ministry of Culture and Social Services, we did not realize how strong an emphasis they put on the need for primers to be functional. They do not believe that adults are interested in learning to read and write just for the sake of reading and writing, but that they need to learn some kind of new development idea through the reading exercise.

Our initial cooperation with the Adult Education Department was just asking them to release their teachers for a primer construction workshop and for a training workshop. They also did the typing of the primers and supplied the paper for mimeographing. However, a year later there was a change of personnel in the department, and the new person decided that our trial primers were not sufficiently functional. He opted to produce his own primers in the way that he was used to and without too much concern for linguistic nit-picking. He invited us to attend his primer construction workshop, but we were not able to effectively work together to amalgamate our different approaches and viewpoints.

II. Thinking about the Problem

The fact that our trial primers were scrapped was, of course, a great discouragement to us, but sometimes a discouragement can open a door which would otherwise have remained closed. In our case we began to ask ourselves some questions which we would not otherwise have asked. Why did they reject our books? They had several reasons, and it would serve us well to try to understand them. We decided to read what we could get hold of on alternative methods for primer construction. We began to ask ourselves, "Why couldn't a good primer be functional also, if that is what the Education Department wants? Why couldn't we use a sight-word method more, such as the Look-and-Say method, if that is what the teachers already know how to teach?"

Our experience pushed us out of what we were taught were the standard SIL literacy procedures, based on what is 'best' for teaching reading in languages with good phonemic alphabets. I greatly appreciate Gudschinsky's contribution to the field of literacy. And if the learners are sufficiently motivated, they will certainly learn to read by her method, even if it isn't their particular learning style. But I contend that Gudschinsky's method is not necessarily the best for

everyone. It is too analytical for people who are not themselves analytical. The reason why we may not see this problem is that we as Westerners are sufficiently analytical to find the method easy to follow. Which method, then, is suitable for nonanalytical people? There may not readily be found one that is suitable. We may have to create one, or several.

III. Talking about Learning Styles

There is a lot of literature on the topic. But unfortunately not much has yet been written addressing the specific problems we face when working with literacy in a foreign culture. And one thing which I find rather confusing is that the different authors use different terminology. Here are some examples: Witkin (1940) uses 'cognitive style' and groups people roughly in two categories 'field independent' vs.'field dependent', based on the way they perceive the world around them and process this information. Cohen (1969) calls her two categories 'analytical' vs. 'relational'. Some use the term 'learning style' to refer to whether people are 'visual', 'auditory' or 'tactile/haptic' learners. Others call these differences 'modalities'. Pask and Scott (1975) use the term 'conceptual competence' and call their categories 'serialist' vs. 'holist'. Dunn and Dunn (1978) say there are eighteen factors that make up a person's preferred 'learning style', referring to environmental, emotional, sociological and physical stimuli that affect a person's ability to absorb and retain information. McCarthy (1980) combines Kolb/Jung's four types with left/right hemisphericity and gets eight 'learning styles'. Cornett (1983) has a list of 'learning style' parameters several pages long. Gloria Kindell and Pam Hollman of British SIL (1988) use the term 'learning style'. They build on Ramírez and Castañeda (1974) but call their two categories 'linear' vs. 'global'. In this paper I shall use their terminology, because I think it is good and will be the one used within SIL in the years ahead. Some writers use the term 'learning style' synonymously with 'cognitive style'. Others distinguish between the two. Edward Semple gives a nice clarification of these terms:

> The term 'learning style' emerged in the 1970s. The researchers working in the area of learning styles take cognitive style into consideration but are generally interested in more practical educational applications and are thus more 'action oriented'. Researchers working in 'learning style' sometimes say they are not especially interested in cognitive style because they say it is more academic. A difference between cognitive style and learning style is the number of style elements considered. Cognitive style looks at just

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> one element of style with two polar extremes; for example, you are either field dependent or you are not (in which case you are field independent). Learning style contains many elements and they are not usually either-or extremes. A person either has or does not have the element in one's style, and the absence of one element does not necessarily imply the presence of an opposite element. (Edward E. Semple, 1982, p. 12)

A whole battery of tests/inventories[4] for determining learning style is available. While most of these tests are useful for determining one's own learning/teaching style, only a few might help define the learning styles of the specific culture we are working in. The problem of determining learning style is a bit similar to that of describing a language. Describing a language has to be done in terms of that language and not in terms of Latin. In the same way, the learning styles of any population may have to be described in terms of that population's cultural values and not in terms of a Western model. And so most of the tests may be unsuitable for the situations we work in. Personally, I think a list of parameters like Cornett's is a good working tool, since looking at opposites can be very helpful. Each parameter is a continuum and one will ask the question: "Does this person/culture tend more towards this end or that end?" In this way one can begin to evaluate the 'learning style' of any person/culture.

I have a feeling that we as Westerners may tend to confuse linear skills with intelligence. Those of us who are linear may subconsciously consider linear skills to be at a higher level than global skills. Some of the early researchers on learning styles (Cohen, 1969) had the hypothesis that one develops analytical skills at the cost of relational skills, i.e. that they counteract each other and one cannot develop both kinds of skills. Recent studies on brain function seem to contradict this hypothesis (Guild & Garger, 1985). Now it seems clear that one can develop both kinds of skills, and thus become whole-brained instead of right- or left-brained.

There are probably both linear and global people in any culture. We might suppose that since there is a normal distribution of intelligence, so there also is a normal distribution of learning styles. However, we have to take cultural values into account also, and it is likely that these values will skew the distribution to one side or the other. The chart below, adapted from Marvin Mayers (1979) shows the values of an industrialized society in contrast to those of a non-industrialized one. One must be wary, however, of lumping together all nonindustrialized societies. It is possible that, as cattle herders

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and agriculturalists may have different values, so they may also have different preferences in learning styles. There are a lot more than six parameters in any culture's value system. But even with only these six one is able to get quite a good picture of it. Each of these parameters is a continuum.

Basic Values

time/money	------	event
object/project	------	person
interrogative	------	declarative
dichotomistic	------	holistic
vulnerability as strength	------	vulnerability as weakness
prestige achieved	------	prestige ascribed

IV. Getting Started

So how do we go about preparing reading materials for people who have a learning style different from our own? For a start, and as a good exercise, we could assume that the group we are working with is as opposite to what we are as we can possibly imagine, i.e. opposite values, opposite ways of perceiving and processing, opposite preferences regarding environmental, emotional, sociological and physical stimuli. This will help us get out of the rut of thinking only in our own style. We may have to read relevant articles to help our imagination. There is a lot of literature about differences in learning styles, e.g. between Indian populations in the States and 'white Americans'. Although these papers may deal with other specific problems than the ones we encounter, they will still help us get out of our habitual thinking pattern.

In some situations we may succeed in explaining to the literacy teachers and supervisors the theory behind the analytical things we are doing when teaching the Gudschinsky method, and they will be able to 'translate' that into their own cultural style. While I fully support the teachers' right to be informed about the theory of what we are doing, I suspect that most Sabaot teachers would rather not be bothered by such linear theory. I have worked with very bright and educated people in our project and found them extremely nonanalytical at heart. I think they'll always feel most at ease with

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their own cultural learning style however much they learn of other styles, just as the mother tongue continues to be the language that speaks to the heart. They will likely have a hard time translating from the linear to the global style. That means it will be up to us to learn to translate concepts from the linear style in which we encounter them into a global style in order to deliver them to the Sabaot in the style most comfortable to them. But as in any other aspect of our work, we need to work together with the Sabaot themselves; they are the owners of the culture, and they will have to have the final say on what style they want their books to be in.

We, linears and globals, need to work together to come up with alternative teaching methods for different learning styles. For instance, I have a good imagination and can visualize quite easily, but I am not very good at devising methods and systems. I need to work together with someone who can set up the methods and systems which I can then apply or adapt to the cultural situation in which I work. But there is more to it than suitable reading materials and appropriate teaching methodology. It is equally necessary to take into account things like personal behavior, instructional behavior, classroom atmosphere, etc. An important pedagogical rule is to go from the known to the unknown, one step at a time. This is not fulfilled by just introducing one letter per lesson if the whole learning situation is foreign to the learner. If people feel threatened by a primer and a classroom, maybe they can learn to read without either, if their own cultural style is followed.[5] It is time that we stop to rethink our whole procedure.

If the people we work among are predominantly global learners, why not try to see how few analytical, abstract, dichotomizing exercises we can get by with? Or said in another way: Instead of starting out by teaching appropriate cognitive strategies for the task of reading, as we might do in a Western context, why not start out with the strategies already found in the population we are working in? One of the most basic learning strategies in many traditional societies is *memorization*. Even though a person eventually needs to learn how to sound out words he has never seen before, this does not mean that we cannot make much greater use of memorization, especially at the beginning. The global lessons we used at the beginning of our primer series use memorization, or the 'Look-and-Say' method, as learning strategy. But I would say that quite a few more than our twelve global lessons are needed. Perhaps the reason we think people are not learning if they just memorize is that we have not yet found a way

of testing them. However, that should not preclude our starting with a skill which the people already have. Later on we shall teach other skills as necessary.

As for repetition of new words a certain number of times, if this is necessary, natural repetitions occur in many songs and stories in different cultures. We have our own Danish folk stories with rhymes that grow longer, or with a couple of sentences that are repeated at the beginning or end of each section, or with different cues throughout to help the memory, since these stories originally were transmitted orally. Many African societies would have folk stories with a similar kind of style. Such material is good for beginning readers.

V. SIL Literacy Courses

A lot has been added to the literacy courses since I attended British SIL in 1974. Nowadays, British SIL teaches a range of methods and approaches, although still covering Gudschinsky more thoroughly than the others. But the students do get a taste of other possible methods and also suggestions on ways of modifying Gudschinsky. There are lectures on personal and cultural learning styles, which give a much greater awareness of how to make a literacy program culturally appropriate. More reading theory is also taught, so that people know why the different elements of the methods are used. This gives people greater freedom to experiment with various learning activities when they face the task of preparing literacy materials on the field.[6]

A further suggestion I would offer is that teachers and students at SIL literacy courses work together on a specific language, assisted by a couple of mother-tongue speakers of the language, who could brief them on the cultural values and learning styles of their people, write the stories, make the illustrations--actually do most of the work. In this way the speakers of the language are trained to prepare literacy materials in their own language, and SIL students are prepared for the kind of role they often face on the field nowadays--that of acting as trainers of and consultants for nationals with a different learning style who do the actual work of creating the reading materials.

Another suggestion is that some of our literacy personnel think about preparing something like a handbook of guidelines for investigating cultural learning styles, suggestions of suitable

approaches, exercises and tests relevant to the different styles, etc. This would be similar to the kinds of aids which are available to guide translators toward accurate, clear and natural Scripture translation.

VI. Implications for our Total Program

Some people may feel that they do not need to think about learning styles because the literacy project they are involved in is running smoothly, because motivation is high, or because the group they work with can learn from a linear approach. However, learning styles also affect the translation side of our work. Differences in learning styles has implications for how one understands Biblical texts, for the ways different people do exegesis, for relationships between translators and consultants, and for the training of mother-tongue translators,[7] just to mention a few areas. In actual fact, learning styles have implications in all situations where one wants to share or teach something unfamiliar.

For example, in what form would you make a Bible study booklet? When I had finished one on the gospel of Mark, and showed it to one of the Sabaot translators, this is what he said: "I see that you have written some questions. What do you intend them to be used for?" I explained that this was a self-study book, or it could be used in a group to help people think about what they read. "But do you really think they can answer those questions?" he asked. Well, I wanted them to do some thinking, never mind whether they could answer all the questions correctly or not. "But don't you think they need to be given the answers also?" he continued. To my way of thinking, that would spoil the fun, and not force them to think. His questions stuck in my mind, however, until suddenly I saw it--the same problem again: My approach was too linear. They might not enjoy finding the answers to those questions for themselves; they might just get frustrated and quit.

I asked myself, "What if I do give them the answers? Will they then see the point of the questions and will they actually learn, by pondering the questions and answers together?" Of course that is exactly the way most people are taught the catechism--by questions and answers which they learn by heart. I've not yet decided whether to put a key with all the answers at the back of the book, in order not to spoil the fun for any linear readers there might be, or to put the answers together with the questions as in the catechism. But

eventually it will be the Sabaot translators who will make the decision.

As I said at the beginning, "Experience is the best teacher," and it has been my experience that the matter of cultural learning styles is one which cannot be ignored in any aspect of our work.

Notes:

[1]Wanda Pace, SIL, Sudan, suggested that we include two kinds of drills. The first kind consisted of fill-in-the-blank sentences with two or three words under the blanks to choose from. The other kind comprised a picture with three to five sentences underneath, some of which are true of the picture and some of which are not. The reader picks out those which are true.

[2]This idea came from Connie Kutsch Lojenga, SIL, now working in East Africa. Global lessons consist of a picture and a short text including one or two new content words which can be quite easily guessed from the picture. The text of each lesson may be related to the previous one as a kind of continued story. (See the article by Liz Hood and Connie K. Lojenga.)

[3]We followed the Handbook on Primer Construction by Katy Barnwell.

[4]See the starred items in the references.

[5]Consider, for example, the approach of Wayne and Elena Leman with the Cheyennes in North America, in which people learn to read by merely following along while others are reading stories or Scripture, or during the singing of hymns. This approach, called 'passive literacy,' is more effective with the Cheyennes than formal classes. (See the article on this program by Hazel Shorey.)

[6]My information on what is currently taught in the British SIL literacy course is from personal communication with Pam Hollman.

[7]See especially the articles on learning styles in Notes on Translation, No. 120, reprinted in Notes on Literacy 58.41-42.

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Notes On Literacy

No. 63, 1990

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SUMMER INSTITUTE OF LINGUISTICS
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DALLAS, TX 75236

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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

International Academic Bookstore

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
U.S.A.

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BRANCH LITERACY UNITS: A POSSIBLE ALTERNATIVE STRATEGY FOR MAJOR NONFORMAL ADULT LITERACY PROGRAMS

Margaret Bendor-Samuel

Margaret with her husband, David, began translation work with the Guajajara people of N.E. Brazil 1959-1969. In more recent years she has taught literacy and program planning courses at SIL schools in the UK and in Dallas, and serves as an international consultant in these areas. In the last decade she and her husband have run numerous strategic planning workshops for SIL members in many countries.

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I. Introduction

In recent years there has been a renewed effort to meet the growing demand for vernacular literacy in some of the countries in which SIL is working. Increasingly our contribution to the development of our host countries depends heavily on our ability to offer help in this area. While there is a commendable increase in recruitment and training, the demand is likely to far outstrip the supply of trained literacy personnel. This article suggests that we look outside of the normal channels of literacy personnel and form literacy units of personnel from management, community development, as well as other specialists who would work with literacy workers in high visibility adult literacy programs.

Tom Crowell, when he was International Coordinator for Literacy, made a helpful distinction between small programs that can be handled by language teams and large programs of high visibility that need extra resources and personnel (cf. Analysis of Problems in SIL Literacy, T. Crowell Feb. '87). Professor John Cairns has provided most insightful and helpful evaluation reports of our literacy programs in Ghana and Cameroon (May 1986). In the 1986 report he highlighted areas where our professionalism in implementing literacy programs could be improved. It is in light of these two documents that I venture to suggest an alternative strategy that I think may help

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to address the problems of lack of literacy personnel and the need for greater professionalism in the area of management.

We must first distinguish the area of literacy that might be helped by this approach. In SIL we use the term literacy for a variety of activities that involve the teaching of reading or the production and use of oral or written literature. These activities may be centered in a formal school setting and be directed toward children either in a preschool, bilingual school or as a mother-tongue component in a national language school. SIL developed great expertise in Latin America in this area and has continued to have significant input into such programs in other countries of the world. Literacy activities, on the other hand, may be directed toward ADULTS, nonliterates or semiliterates, who for some reason have missed or never had the opportunity of learning the skills of reading in school, or whose school-acquired skills have not enabled them to become fluent readers. It is primarily concerning large scale, high visibility, nonformal, adult literacy programs I am making the following suggestions, although some of the ideas might be adapted for a program of material preparation and teacher training in a formal situation. I am not anticipating that small programs will be directly helped by this approach; we shall need to continue with literacy work in these, much as we have already done.

There are many reasons why the literacy emphasis in SIL has drawn fewer people than translation. Translation has rightly had the center focus, but unfortunately this has often meant that literacy has been viewed as a second-rate occupation. While some of these reasons are being addressed by the new initiatives being taken by the Literacy Department, it is unlikely that we shall produce sufficient literacy specialists for the increasing demand.

Another serious concern demonstrated by the attrition rate among literacy workers in past years is the need for field entities to provide the support, finances and consultant expertise that literacy demands. The demands of a large literacy program are quite different in scope and magnitude from those of translation teams and maybe this is not clearly understood by some of our entities. Better training and a higher prestige within the organization will not substitute for more appropriate support on the fields.

In listing Basic Principles for Adult Literacy Programming, in his 1986 report, in Annex D, Prof. Cairns mentions two principles that are

particularly relevant to this discussion. He says "At the program level the critical factor is the overall delivery system, i.e. the organization, management, supervision, monitoring, support services, etc. This is more important for program success than methodology per se." He further says, "The implementation of literacy programs requires the same level of professional expertise as does linguistic research. Development of literacy materials and training of teachers is the initial step only. Ongoing monitoring, revision, testing and support services are required for program success." Another theme that Prof. Cairns mentions in his evaluation is the need to consider functional literacy. This is still the type of literacy program that is most accepted in government and UNESCO circles and which is most attractive to funding agents, because it combines the skills of literacy with technical/vocational/agricultural instruction and demonstration.

Tom Crowell has asserted that SIL has historically advocated (without actually saying it):

a) doing the linguistic work and preparing materials, but not getting much involved with the implementation of a program.

b) working to see people read the Scriptures, but not getting too involved with functional literacy.

In some of our host countries our teams have been so overwhelmed with the linguistic and translation task that they have had little energy and sometimes little encouragement to make outstanding achievements in the area of literacy.

In my diagnosis of SIL's problem there are two important factors. On the personnel side there has been lack of commitment and support both for the individuals engaged in literacy and for literacy programs per se. On the program side we still spend more time on methodology than we do in program design, management and support. Administrators optimistically expect the skills needed for both the former and the latter to be found in the same person. I believe we should take serious note of our need to show the same level of professionalism in the implementation of literacy programs as we do in our linguistic research. The strategy I am suggesting takes these two factors into consideration: greater support for the literacy worker and a more professional approach to literacy program management. It also considers the possibility of adopting a functional approach to literacy programs.

In most non-SIL literacy programs of any size there is a management team that organizes and implements the program. Members of the team have different areas of expertise and training. Included in any team are people that not only understand pedagogy, but those who are concerned with other areas of development: health, agriculture, etc., as well as those who can manage the finances and facilities. Sometimes there are other specialists, such as psychologists and printers, etc. The idea of functional literacy has been central to such programs for a number of years. That means that adults learning to read immediately use their skills to meet their own needs, whether these be in improved farming, health, religious purposes, or any other area. Funding agents look for synergistic programs that integrate all development efforts within a community with the literacy thrust. Prof. Cairns points out the need for more of this in the programs he evaluated.

Some programs in which SIL has been involved have done this most successfully. David Jarvis among the Tzeltal in Mexico integrated work done in literacy by the Reformed Missionaries with teaching improved agricultural methods in his rural center. Jon Arensen in the Sudan, working with the Murle people did a similar thing. He worked alongside medical and rural development teams and made literacy relevant to the needs of the people. Most of our teams have not been able to do this either through lack of understanding, time or expertise.

II. The Formation of Branch Literacy Units (BLU)

1. The concept

I would like to suggest that we consider forming special units for literacy work at Branch level. These would consist of a small number of persons, perhaps from four to six but maybe more, assigned to work as a team assisting translators with major literacy programs. The skills that each would bring to the team would be different from those brought by the others. At least two members of such a team would be literacy specialists as we have normally thought of these, i.e. persons who have followed the usual training path of linguistic and literacy courses. Hopefully one of these would be a good, competent linguist who would be able to help solve the linguistic problems associated with the making of pedagogical materials. The other(s) would need skills in teacher training and class management and would specialize on the pedagogical, practical side of the programs.

The other members of the team would not necessarily be literacy specialists in this sense, but would be drawn from the ranks of Intercultural Community Work (ICW) and Management, with possible input from Printing Arts. The management team member would be primarily responsible for the organizational and management aspects, public relations, the obtaining and management of funds, writing of reports and keeping records, as well as the teaching of these skills to local supervisors. The ICW member of the team would be someone skilled in development principles and public relations, to work with local leadership, government officials and other development agencies, and so integrate these features into a functional literacy program. Other members of the team might bring skills in art work, printing, marketing/distribution, audio programming, Scripture use, etc., although the function of such persons might not be limited to the literacy unit.

One advantage of such a Unit team would be to strengthen the management side of the program as well as to integrate a functional emphasis (development) into it. Another advantage would be that SIL would be drawing personnel from areas other than the literacy pool which tends to be shallow. This approach would provide the support and backing that literacy teams have often felt lacking, and give them the expertise in management and other areas that they have needed.

Those coming from areas of expertise other than literacy would need to be exposed to the principles of nonformal education programs, in courses or through an internship program. The literacy specialists would be expected to understand and appreciate ICW and managerial principles. They would all need to be people who showed sensitivity toward language and culture and ability to function in a cross-cultural setting. While the major contribution of team members would be in their area of expertise they would also function as helpers in other areas as they were needed. They would organize and help in workshops, transport, literacy days, etc. Each member of the Unit would be committed to the success of the whole project, regardless of his/her area of expertise.

This concept is quite different from the way SIL literacy teams have traditionally functioned. The Unit would not be tied to only one language program but could serve a number at the same time. They would, however, expect to be related to the Bible Translation thrust because one of the major reasons for helping the language teams

would be to facilitate the use of the Scriptures that they are translating. Their primary contribution would be in the implementation of a literacy program that had already been initiated by the language team. Prof. Cairns in his evaluation report of the Ghana literacy programs mentions four stages in the development of a literacy program toward self-management. Stage 1 consists of the making of materials and testing them in a pilot program. Stage 2 is introducing the program to the community and the setting up of classes. Stage 3 is assisting the programs in reaching self-management. Stage 4 is upgrading self-managing programs so that they are financially independent. I believe that the Branch Literacy Unit should take over the major responsibility of a program early in the second stage.

2. Responsibility of the language team

The initial work on linguistics, the assessment of the need for a major literacy thrust, the selection of key local people, the testing of trial materials and the running of a pilot project would still be the responsibility of the language team. I would envisage that advice and assistance in such activities would be available through the Unit manager or Branch literacy coordinator. Once local leadership capable of participating in the literacy program has been identified, the Branch Literacy Unit would take responsibility for the program. They would work through local persons for its expansion and development as is culturally relevant. The Unit would be responsible for the organization, reporting, funding, training and evaluation of the program.

Experience tells us that the kinds of men or women selected from the language groups for leadership in literacy programs are generally bilingual. This would be important because the members of the BLU would not expect to learn each of the languages with which they assist, although some exposure to at least one would be essential for the literacy specialist members of the team and an advantage to them all.

3. Selection of language programs

The Branch Literacy Unit would serve only the selected language teams and would not be available for smaller programs. Only those language groups would be selected which fulfil the following conditions:

a) There must be a good possibility that mother tongue literacy would be successful because of community interest and involvement and/or official support.

b) There must be a language team that is willing to cooperate with the Branch Literacy Unit and will devote time and energy to the development of materials, in stirring up interest in the community, identifying and giving initial training to (a) key supervisor(s) and running a pilot program. This involves considerable effort by the language team early on, but later the Unit personnel would largely take the work over and free the translator to translate.

c) There must be a program of sufficiently large scale that it exceeds the capacity of a translation team to handle at the same time as doing linguistic and translation work, thus justifying the deployment of the Unit.

4. Location and indigenization of the Unit team

Ideally I would envisage the Unit team setting up a simple-style training center near the language groups that it will serve. This will be the center for the team and a small training facility for the members of the language groups who might need workshops in literacy, ICW, management, etc. Normally teachers will be trained within the language area, but supervisors from a number of language groups might be trained together at the center. To begin with, the membership of the Unit would probably be expatriate, but as local people are identified and trained they could become staff members and take their place in it. If things develop as they have in Ghana, a majority of the team might be local people within five to seven years. Their salaries would come from the funding agents or through the development of fund-producing agriculture or industry in connection with the center. The majority of their training would be on the job and through the experience that the programs provide, although some able local people may be helped to receive further formal training. I would envisage the center being handed over to a Fraternal Organization in due course when the program was ongoing, and that

the national members of the Unit would become part of this. There might be one or two such centers in the same country. (I do think that a separate place from other SIL centers is important. We want to keep it within the living range of village people, with an operation that will not represent a very much higher life-style than their norm. We need it to be a place which local people can eventually afford to operate without our aid.)

III. Preparing for and Setting Up a Branch Literacy Unit

1. The following steps should be taken:
   - Research to identify entities where such a Unit would be welcome and could succeed. For this there must be the backing of the area director, the entity director and the language teams.
   - Identify a Unit Facilitator. This person may become the Unit leader, but not necessarily so. He/she would precede the Unit in the field by several years and would work with the language teams and the administration in identifying suitable language groups for the Unit to assist. He/she would work with the teams on a program strategy and see that they received the help needed in involving local leadership, in making materials and in identifying and training possible supervisors. Preferably he/she needs to be a person that already has standing and credibility in the entity. If a less experienced person has to be chosen, he/she needs to work under the supervision of a person with such qualification.
   - Recruit and train the members needed for the Unit.
   - Request funding for pilot projects.
   - Manage pilot projects.
   - Request funds for the Literacy Unit's program.
   - Set up a literacy center.
   - Implement programs. (I suggest that the Unit start with just one and then build up to more over a period of years.)
   - Identify local people to serve on the Unit and train them through the project.
   - Transfer the center and operation to a Fraternal Organization.
   - Find ways of making the Unit financially independent.

2. Qualities needed in a Unit facilitator

The person assigned to work in this initial planning stage must have the confidence of both the administration and the language teams. He/she must be someone who can inspire others and work through problems optimistically. He/she must be able to work with officials and leadership in the language groups. He/she needs an entrepreneurial outlook and should be ready to try new things. Linguistic expertise is an excellent qualification but not the most essential one for such a person. The essential skills must be in ability to relate to people. If he/she combines literacy and linguistic skills with these he/she will be able to give the technical help needed, otherwise he/she will need to see that the teams get help from consultants.

During these preparatory years the recruitment and training of Unit members will take place. Part of that training might include an internship of at least six months in Ghana or another country where we have successful adult literacy programs, and a language and culture learning experience with a language team in the country of ultimate service.

IV. Conclusion

The strength of this approach is to give the literacy thrust a new impetus and provide the support structure that has often been lacking for literacy specialists as well as for language teams expected to develop major literacy programs. It should also develop 'professionalism' in adult literacy programs and integrate them with development within the community. It sets out to train local people for management positions from the beginning and provides them with on-the-job training. It could successfully lead into a National Fraternal Organization that has trained leadership at least in the area of literacy.

This suggestion is for high profile situations with promise; the ideas came to me as I considered situations in Africa and in the Sindh in Pakistan. I do not know how well they will fit other situations. I do not perceive the Unit as helping all the language groups of a Branch. There are many programs where significant literacy is either not desired or not possible for other reasons. In these types of situations I do not believe we should consider placing literacy specialists or expecting the Unit to serve. I would expect to

find, however, that a larger number of programs will develop significant literacy programs once there is a model of success within the entity. Ghana is a good illustration of this. I do believe that a slightly different model would be appropriate for areas where literacy has to precede translation for political or religious reasons.

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GUIDELINES FOR AREA CENTERED PROMOTION-DISTRIBUTION TEAMS

SIL Philippine Branch

The development in the Philippines Branch of SIL of a program using area centered promoters/distributors instigated the formulation of guidelines, to insure cooperation and a good relationship between the new entity and the translation team. The following statement prepared by the Literacy and Literature Use Department of the Branch presents a number of suggestions which could have a much broader application--hence are presented here.

I. Ideal Responsibility
II. Areas of Caution to Note
III. Job Description
IV. Guidelines for Operation

With the development of a program using area centered promoters/distributors we have been moving into new realms in the Branch. Rather than continue to move into this area a bit haphazardly, it seemed advisable to articulate a philosophy and formulate some guidelines. A committee was formed by the Technical Studies Committee to do this. Following is the TSC approved statement coming from this committee.

A Philosophy for Effective Distribution and Use of Vernacular Materials

I. Ideal Responsibility

1. Shared responsibility

What would we like to aim for is a mutual help and responsibility kind of relationship between the promoter/distributor and the translation team with whom he works. It is the technical team who has the expertise in the language and culture of the group and in order to plan any kind of a promotion program, the application of this knowledge is essential. It is the promoter, however, who has the creative ideas and time to seek the ways and means to apply these ideas. Therefore the translation team and the promoter are mutually dependent upon each other in order for an effective plan to be put into action.

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2. Community involvement

We recognize that the most effective plan will involve the local community from the earliest possible moment and to the greatest extent possible. The community needs to 'own' the program in order to insure some kind of ongoingness. This means that wherever possible we would aim for programs that are do-able by the community without a lot of input from the outside. Because of this, high profile, high technology marketing focus approaches would not be first choice.

3. Flexibility allowed

There will also need to be a certain amount of flexibility because of differences in situations. We want to match programs with what will work best for given situations. Therefore there is no single model which we would put forth. Adequate study researching the applicable areas must be done in order to plan an effective program for each language project.

II. Areas of Caution to Note

Having stated the above as a general philosophy, it would do us well to articulate some of the dangers when we talk about bringing a promotion expert into any area. These are the red flags which we want to take note of and work to avoid.

1. Teams may assume that they have no more responsibility once a promoter comes on the scene. We do not want this to happen. The promoter cannot do an adequate job alone. He must have the input of the team.

2. High profile, western type programs could act as a deterrent to the local community becoming involved. We would want to think carefully about any promotion plan introduced which could have this effect. If our programs are so complex that they would squelch participation by the local community then we defeat the ongoingness leading to independent operation at which we are aiming.

3. There could be implications and/or possible repercussions which high profile programs in the Philippines might have on SIL work in other areas. We want to avoid this whenever possible.

III. Job Description

What is it that we would expect the promotion expert/consultant to do? What particular areas of responsibility would fall into his area of expertise? The committee would like to propose the following:

1. He could establish multilanguage distribution outlets which will act as supply centers for outlying places.

This would apply in particular to the urban centers outside of the actual geographical location of the language group, but could also apply to municipalities within the location of the language group.

2. He could help churches, missions, Bible schools, etc. to catch a vision for practical programs of Literature-use such as:

literacy classes,
health seminars,
vernacular Bible studies,
production of literature and/or audio programs,
distribution.

The above are the kinds of things we might expect to emerge as a result of planning which is done in consultation with the technical team(s) working in the particular language group(s). Commitments regarding any of the above would be contingent upon the availability of materials and consultant help.

3. In consultation with the relevant team(s), he could give or arrange for : cross-cultural communication seminars,

literature-use seminars,
literacy teacher training,
writers' training,
health education training,
translation principles seminars.

4. He would follow up on groups that have initiated programs, in order to advise where needed and help to keep the program going until brought to successful completion.

5. In collaboration with teams he could initiate and implement motivational activities which promote use of the vernacular such as:

radio broadcasts,
film/slide/video showings,
advertisement of materials,

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vernacular reading/writing contests.

In order for a person or team to do these things effectively a certain amount of training is needed. Therefore relevant requirements would be:

- knowledge of the trade language or Filipino, whichever is most applicable,
- good background knowledge of each language/culture group represented,
- SIL support course and as much course work as possible in anthropological areas, especially those in line with the principles of community development as propounded by Yost and Gallman,
- a minimum commitment of one term.

It should be noted that not all promoters will be expected to do all of the above. We want to keep sight of the fact that programs must fit the needs and potential of the particular situation in order to achieve maximum effectiveness.

IV. Guidelines for Operation

1. The planning for the promotion and distribution of vernacular materials will be a joint effort by the promoter/distributor and the technical team in consultation with appropriate director and LLU (Literacy and Literature Use) Department Head. Neither translator nor distributor will have exclusive control of the promotion/distribution program. If for some reason the translation team is not available (e.g. no longer on the field), the promoter will work in consultation with the appropriate personnel director and the coordinator of the Literacy and Literature Use Department.

2. When outside funding is deemed necessary, the rule of thumb is that the program will control the funding (not the reverse). Before any extensive outside funding is sought, a plan must be carefully formulated and approved by the appropriate Branch authorities.

3. Responsibility for funding project costs should be shared by the translator, the distribution team, and the Branch.

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The translator is responsible for getting the materials he wants distributed to the promoter-distributor. That means he bears the Book Depot and shipping charges. He gets back part of that since he is refunded from the sales. The translator would also be responsible for his own expenses in any workshop and/or seminar set up by the promoter to further sales and use of vernacular materials. Other costs of conducting such a workshop might be the shared expense of the promoter and the translator.

The distribution team is responsible for normal project expenses incurred to do its job. This would involve travel, advertising, PR gifts, materials and the usual kinds of equipment needed to do the job, such as typewriter, tape recorder, personal computer. This would put the distribution team more or less on the same level as the translation team which pays for all normal project expenses.

The Branch would be respon. ble for raising funds for approved major project expenses such as films, projectors, paying for extensive radio broadcasting, travel of consultants who may be needed for seminars or workshops which would promote literature use. By making the Branch responsible in these areas, it not only eases the financial burden but encourages the distributor because he is assured of Branch support. A further advantage is that it provides a means whereby the Branch can keep tabs on the program in case it should end up going in undesirable directions.

4. In regard to paying salaries to nationals involved in the project, our first choice would be that local entities (probably churches, if they exist) would assume the responsibilities without outside remuneration. If, however, there are no options along these lines and salaries from the outside are necessary in order to get a program going, then we would offer salaries. We don't want to lose sight of the fact that we want to build ongoingness and generally the more dependent a community is on outside funding, the less likely they will continue on their own. The ground rule might be, if you have to pay salaries to get something going, do it minimally and with a time limitation in mind.

LITERACY IN THE '90s

Literacy in the '90s is a twenty-four page, well illustrated publication highlighting recent SIL literacy activities around the world. It has been produced by the International Literacy office of SIL in commemoration of the International Literacy Year proclaimed by UNESCO. It is available in English, Spanish and French.

Copies may be purchased through the Academic Bookstore, 7500 W. Camp Wisdom Rd., Dallas, TX 75236.

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VERNACULAR PRESCHOOLS: WHY ALL THE INTEREST IN THEM?[1]

Steve Simpson

Steve and his wife Vicky have worked with the East New Britain Provincial Government since 1983. Their assignment has been to assist in the establishment of village based preparatory school programs, teaching children the skills of reading and writing in their own language. Currently the project is operating in five of the seventeen languages of West New Britain, in approximately fifty-two villages with about 2200 children enrolled.

There is high interest in local language preschools these days. These schools are being started in a variety of places. Often when one begins, neighboring language groups also request one to begin in their area, too. Papua New Guinea's preschools are becoming noticed internationally, particularly by researchers interested in bilingual education.

What are these schools and why the growing interest in them? Basically they are classes to teach children to read and write in their mother tongue before they enter Grade One in the community school system. Classes are held in a variety of formats, ranging from a formal system (North Solomons Province attaches them to the community schools), to a nonformal system (where classes of children are sponsored by the village church or a nongovernmental agency), to informal (where parents or other interested adults attempt to teach the children in the community). Either churches, community groups or provincial governments, or a combination of these groups, sponsor the preschools.

Local communities take an active part in the management of the schools. Typically, the teacher is a person chosen by the community. Sometimes the person has had teacher training but more often not. Most are school leavers, literate in their own language and trained to teach during a three to six week training course.

It takes about two years to prepare a school to operate successfully. The process begins with a linguistic analysis of the language and the formation of an alphabet, so that it can be written. Once all of this has met with the approval of the language community, reading readiness books, primers and the developmental

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or reading practice materials are prepared with the help of local people in writers' workshops. Production continues. Books, books and more books are produced. They must be of a wide variety. The range must include well-known information such as cultural stories and traditions. Stories of this type are easy for a new reader because he already knows what to expect.

Preparing reading materials requires a great deal of community involvement, where local people are trained to write books and stories. Eventually a sequence of reading materials is completed, and training for using them can take place.

But why the growing interest--particularly in the light of the lengthy preparation? There are at least three possible explanations.

The first has to do with how the present educational system is seen. Interest in anything new is aroused when the old is seen to have problems. There is a call for return to traditional values and a questioning of the overall purpose of the educational system. Education in the vernacular is seen as desirable--strengthening cultural values and not divorcing the child from his village.

Second, where missions began education in local languages, there are people who still remember learning to read and write in their language. Intuitively they feel that approach is better. In these areas there is high interest in vernacular education programmes. Some people see them as simply being a wise application of the old teaching principle, 'Start with the known and then proceed to the unknown.'

Third, vernacular education is not really a new idea. It's been considered before for widespread implementation. The reasons for not doing so had to do with the practical considerations of expense, too many languages, and national unity. There was also a notion that the more time a child spent in learning the national language, the better he would be able to speak it. Consequently children were often banned from speaking their own language (or even *Tok Pisin*) at school.

The international interest is gathering specifically at this point. Does more time spent in the second language result in greater facility in that language? Only recently has research been able to provide any definite answers. Three different projects in three different countries--the United States, Australia and Papua New Guinea--have

provided overwhelming evidence in favor of using the local language to begin the educational process.

The Rock Point study in the USA with Navaho Indian children showed that those who spent their first years learning in their own language were farther ahead in their ability to speak, read and use English as a second language, when compared with students who began with English. The study in Australia showed that a start in local language actually enabled children to perform better in other subjects as well.

In Papua New Guinea, the North Solomons *Viles Tok Ples Skul* has been the object of more than one research project. In 1981, John Downing compared three groups of North Solomons school children. The first group was made up of children with education in English only. The second group was made up of children with *Viles Tok Ples Skul* experience. The third group was made up of children with no educational experience in either English or *Tok Ples* (vernacular). The hypothesis was that these three groups could be ranked in their linguistic awareness and in their understanding of what reading was all about. Those with *Tok Ples* school experience would be more advanced than those with English experience, who, in turn, would be more advanced than those with no educational experience.

As he expected, Downing found data to support *Tok Ples* education giving a greater clarity in concepts related to reading. However, to his surprise there was more confusion related to reading in the English background students than in those with no schooling at all. He concluded that starting the educational process in a language not spoken by the student was actually unproductive because the students' understanding of reading was retarded. Downing's study has already sparked more interest in research of vernacular education.[2]

It should be clarified that we are not considering here a comparison of an all-English educational system with an all-*Tok Ples* educational system. Rather, we are comparing the effects of beginning education in English with beginning in a known language and then changing to English, after the basic literacy skills have been taught in the vernacular.

Much is gained by beginning education in *Tok Ples*. Concepts and ideas are more easily and thoroughly formed. The child has an opportunity to think about literacy (language, communication, reading, writing) in his own language. This gives him a broader base

for learning a new language. His literacy skills learned in his own language are transferable to the new language.

[1]A slightly different version of this article appeared in "Heart and Mind", a publication of the Summer Institute of Linguistics and the Bible Translation Association of Papua New Guinea, Vol. 2, No. 1, 1986, pp. 5-6.

[2]Note: In similar tests conducted in 1985, Prof. Downing found that the language awareness of children who had begun their schooling in the *Viles Tok Ples Skul* (VTPS) and then gone on to English school was markedly better than those who had been schooled only in English. The ex-VTPS children could read well in their mother tongue and in Pidgin English (which they had picked up on their own) and reasonably well in English. The English-only children could not read well in their mother tongue, though one of the two classes did do well in Pidgin. They were only a little better in their English reading though they had had one or two more years of English schooling. Prof. Downing felt that the English-school-only children were parroting more than reading and therefore had difficulty transferring to another language. (See Downing, in *The Reading Teacher*, 37.4.367-370.)

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A MATERIALS PRODUCTION AND CURRICULUM PLANNING COURSE FOR VERNACULAR PRESCHOOLS

Gay Brown and Steve Simpson

Gay is from Melbourne, Australia. She trained as a teacher of Kindergarten to Grade Two pupils, at Toorak Teachers College. She and her husband, Carl, went to Papua New Guinea in 1970. They have worked as Literacy Specialists in a number of language groups, particularly in the East Sepik Province, and as consultants for the Provincial preschool program on Bouganville. Gay has been the Literacy Coordinator for the P.N.G. Branch of SIL for the past five years.

I. Introduction
II. Goals of the Course
III. Participants and Staff
IV. Schedule
V. Book Production
    1. Instant Readers
    2. 'Story Track' Books
    3. Story Books for the Teacher to Read to the Class
    4. Big Books for Shared Reading
    5. Alphabet Books
    6. Visual Discrimination Books
    7. Language Experience Charts
VI. Teaching Aids and Games
VII. Curriculum Planning
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IX. How this Course Differed from the 1988 Course
X. Appendix

I. Introduction

There is a real interest in, and a demand for, training in materials production and curriculum planning for vernacular preschools in Papua New Guinea. This course was designed to meet some of this felt need. It was the third course held at Ukarumpa. The first course was held in 1986 with sixteen participants. The second was held in 1988 with nineteen students.

The 1989 preschool course was a seven weeks course, commencing on July 12 and ending with a graduation ceremony on August 29. The course was held at the SIL Training Center,

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Ukarumpa, in the Eastern Highland Province of Papua New Guinea. Sixteen trainees attended.

II. Goals of the Course:

1. To introduce each trainee to the concept of preschool, a vernacular preparatory school which young children of approximately seven years of age attend *before* beginning in classes at the Community School in English. The course covers these topics:

- what it involves,
- why we have preschools,
- how we begin preparing for a preschool,
- becoming aware of the advantages preschools provide for the children and therefore the community.

2. To begin planning a preschool program, particularly the Reading Readiness stage:

a) to plan Visual Discrimination activities, to prepare and silk-screen at least one Visual Discrimination book and to prepare stencils so the other books can be produced in the village.

b) to have Oral/Aural activities planned.

c) to plan a Prewriting Course to fit the orthography of each language.

d) to be aware of the need for Teachers' Guides to combine all sections of the Reading Readiness Course and to begin working on them as soon as Points a)-c) above are completed.

3. To introduce the need for many simple picture/story booklets for the children to read and for each participant to produce at least ten of these booklets (single copies) at the course and to stimulate ideas so that the students can work on other books back in their own areas.

4. To understand the two tracks for learning to read (Story Track, Workbook Track – the Multistrategy Approach) and the reasons for each track. To identify the cultural themes for a term and to plan several Story Track books to fit the themes.

5. To introduce nonliteracy subjects to the trainees (e.g. Maths, Science-Nature, Health, Cultural Studies, Music, Outdoor activities) and help them to begin to plan courses suitable for their own areas.

6. To make, and learn how to use, several Teaching Aids/Games for Reading Readiness and Maths.

7. To learn how to prepare stencils, to use silk screen and to collate booklets so the trainees can prepare booklets independently in their home areas.

8. To make a wooden literacy box in which to keep their teaching equipment in the classroom.

This preschool course is designed to help the participants get started with their preschools. It will take some months after the course to continue the preparation of all the materials needed, to conduct Teacher Training Courses, etc., before preschools can begin to operate in the village areas.

III. Participants and Staff

Sixteen students from eight different language groups participated in the 1989 course. We also had one national tutor, who attended to receive extra training. The participants came from five different provinces throughout the country and were sponsored by various groups.

The staff consisted of Gay Brown, principal, Steve Simpson, vice principal, and Glenys Waters, Vicky Simpson and Jerry Robinson. Glenys taught the sessions on teaching aids every afternoon. Vicky taught the session on how to teach Bible stories, Jerry was the business manager and also taught the use of silk screens. One of the tutors, Barbie Hynum, gave five excellent sessions on how to illustrate children's stories; she exhibited great creativity and the minicourse was much appreciated by students and staff alike. Mary Stringer gave some excellent sessions on the Multistrategy Approach to teaching reading.

A number of folk joined us for panel discussions and we appreciate their input: Bob Litteral, Don Toland, Dennis Malone and Miki Senkai. Dennis Malone also gave a session on the new Language and Literacy Unit of the Department of Education which will be giving much guidance on the work of preschools throughout the country in the future. He also shared a session on the need for 'bridging' in Grade One of the Community Schools, to take advantage of all that the children have learned in preschool. Elaine Herbert, a Reading

Recovery teacher from New Zealand, showed the students how to make Big Books.

We appreciate the help of the Training Center staff, especially Miki Senkai, the manager, who willingly helped to make sure the course ran smoothly, and Bayuna, who took the orientation session at the beginning of the course in Miki's absence and also taught the students to make the wooden literacy boxes. Carl Brown also spent many hours duplicating student's notes and books used for group projects; his help was much appreciated.

Besides the fine staff personnel, each language group had a tutor to work with them. The tutors all work full-time with the various language groups represented. The work of tutors is very important in this course. Each tutor worked very closely with his/her group, making sure the students have understood the lectures, and helping them put theory into practice. Tutors also play an important role when they all return to the village areas; they help the trainees to continue planning and preparation of materials, and give guidance as necessary. One national tutor attended the course for extra training. He worked with the Islands teams in general and not with one specific group. He is a very experienced worker employed by the East New Britain Provincial Government and is involved in the E.N.B.P. preschools program. He is a gifted artist and produced some excellent story books that were duplicated for the Islands teams to use.

IV. Schedule

The daily schedule was 8.30-11.30 am and 1.30-4.30 pm. Most lectures were in the mornings, followed by some assignment to be worked on in language groups. The work each afternoon consisted of various practical activities--e.g. learning to draw, learning to print neatly, writing and illustrating children's story books, making teaching aids, making literacy boxes.

Because some language groups had already done some preparation for their preschool we tried to make the course flexible for them, so that these groups could work on activities they still needed to do and not do unnecessary repetition of work. E.g., the Sursurunga group had prepared all their Story Track Books in the village before they came to the course. (Please see Appendix for the week by week schedule.)

V. Book Production

One of the biggest needs for literacy in general and preschools in particular throughout Papua New Guinea is the availability of a good variety of story books in the vernacular. People learn to read by reading and we need to make sure the readers have ready access to books. During the course we encouraged the production of a number of types of books. Most of the books prepared were single copies; we encouraged the preparation of a variety of different books. Each language group can decide later which of these books they would like to silk-screen in larger quantities. Each language group silk-screened thirty-three copies of at least one Visual Discrimination book and thirty-three copies of at least one Story Track book. This gave them some experience in planning the content of a book, how to do layout, how to design a cover, preparation of stencils, how to use the silk screen, how to collate books, etc.

Types of books made:

1. Instant Readers:

Fourteen Instant Readers were given to the students. Some completed all the books during the course, others took those they did not complete home to finish at a later date. Eight of the books were prepared before the course, using pictures available from the SIL files. Six extra books were prepared during the course, three by staff or tutors and three by Peter Allan, the national tutor. Each of these books follows a specific topic. Students wrote a word, phrase or 'frame sentence' under each picture. Any pictures that weren't cultural for a specific language group were removed or changed to make them cultural. Topics were: father's work, mother's work, birds, animals, shells, fish, 'my garden', household things, things of the bush, 'She is carrying...', 'Who is eating?', 'What is the pig eating?', 'What can I eat?', different leaves. The students were encouraged to color the pictures, using crayons to make the books attractive for children. These books are for use in the Reading Readiness stage of the program. They can also be used as library books throughout the year.

2. 'Story Track' Books

These books are to encourage reading fluency. They consist of a series of four (or more) pictures that tell a story. Students were given three of these books as examples: Story of the Butterfly, Story of the Chicken, Story of the Duck. They were encouraged to prepare some

story track books of their own. To do this, the students drew the pictures, wrote a story (a single sentence under each picture), colored the pictures, designed the covers, prepared a title page, etc. Topics included a life cycle story, how animals get their food, making a cultural item, an adventure/action story and games children play. Some groups prepared a lot of these stories, others did only one or two. They will need to continue working on these back in the village areas. These will need to be silk-screened for classroom use at a later stage.

3. Story Books for the Teacher to Read to the Class

The picture and scripts for these story books were prepared before the course. Two extra books, written and illustrated by Carol Spaeth, were added during the course. The students translated the story and colored the pictures. Titles of these books are: My Cat, Good Fruit, The Pig in the Garden, The Story of a Frog, The Big-mouthed Frog, 'Where is my Kitten?', How the Dog Tricked the Pig.

4. Big Books for Shared Reading

Each student wrote several stories and chose one of these for his Big Book. These large books were produced on scrap brown paper from the SIL print shop. Students drew the pictures, then wrote the story in large print. The pictures were then colored, making a very attractive book. These books are to be read by the teacher in a shared reading experience. The children learn to read the books with the teacher, then later by themselves.

5. Alphabet Books

Students were shown examples of Alphabet Books during the course. Six of the language groups decided they would prepare Alphabet Books. Most did single copies, to be silk-screened at a later date. (One group silk-screened thirty-three copies.)

6. Visual Discrimination Books

These are workbooks for Reading Readiness. Most groups designed several Visual Discrimination books and silk-screened thirty-three copies of at least one book. Because five of the language groups are from the Islands regions and their languages are similar, these groups worked together to design books that could be used by all the groups. A few special pages were added for specific language needs. These books were put onto the computer, stencils cut on the

printer, then the books were duplicated. The five groups produced thirty-three copies of Books 1-6. The books are of high quality because of the use of the computer. They are now available on computer to be used by any other Island languages.

The Numanggang group chose not to prepare Visual Discrimination books as they will be following a different reading approach. Instead, they worked extensively on Story Track books.

7. Language Experience Charts

Each student made a large Language Experience Chart. The students wrote stories about cultural items (e.g. pigs, gardening, hunting, fishing) onto large charts, then the stories were illustrated. Sentence strips, phrases and words were written on separate cards.

VI. Teaching Aids and Games

The last hour each day was used for making teaching aids or preparing reading-related material. These activities included the following:

- Picture cards for Visual Discrimination activities
- Alphabet cards or mural
- Calendar books
- Pocket charts
- Instant reader and sentence strips
- Using songs on charts
- Poems and Riddles
- Language Experience stories
- Writing stories (funny, imaginative, traditional)
- Making a Big Book for Shared Reading
- Comic story for Health
- Cloze exercises
- Maths cards
- Vernacular number systems
- Calendars and counting
- Scales for weighing

VII. Curriculum Planning

The participants made a start on planning the curriculum for various subjects, e.g.

a) They planned out all the prewriting activities for the Reading Readiness stage.

b) Oral/Aural activities for the first term were planned.

c) A series of Visual Discrimination books were planned and stencils made. Thirty-three copies of at least one book were silk-screened. Other books will be silk-screened in the villages using the stencils prepared at the Course.

d) Culture themes for Term One (ten weeks) were selected. These cultural themes will be used in planning Story Track books as well as planning Cultural Studies lessons, Health and Science/Nature lessons (as far as is appropriate). Sample lessons were prepared for some of these subjects for practice.

e) A start was made to identify lessons that would fit in with the various themes for Science/Nature, Health, Cultural Studies and Bible Stories.

The planning of the curriculum will continue when the students return to their home areas. This is a big task and the tutors will need to work closely with their groups to do this. Most students would not have the expertise to do this on their own.

VIII. Evaluation, Notes, Video, Student Council, Social Committee

Evaluation of student progress. Formal tests or exams were not given during the course. Instead, each student was evaluated as he completed each project. A large chart was displayed in the classroom. It listed the students' names as well as all the projects. As a student handed in a project, it was marked on the chart. The chart helped keep the students 'on target' and provided a challenge for slower students or those inclined to be a bit lazy. At the end of the course each tutor wrote an evaluation on each student in his group.

Student notes. Duplicated notes in Melanesian Pidgin were prepared for each lecture. These contain many ideas and the students will need to refer to them as they continue planning their preschool programs. The notes were collated and given to the students and all staff in four 'text' books:

a) Reading Readiness
b) Learning to Read
c) Mathematics
d) Nonliteracy subject

e) Glenys Waters also prepared a resource book on teaching aids/reading activities covered in her class.

Video. Because of the need for training courses throughout the country, and the difficulty in providing experienced staff in the various provinces, it was decided to video key lectures. The five sessions given by Barbie Hynum on how to do illustrations for children's stories were taped. Mary Stringer's sessions on the Multistrategy Approach to teaching reading were also taped. These video tapes will provide a valuable resource for use throughout the country.

Steve Simpson had previously made videos of some of the preschools in East New Britain. Some of these were shown to the students towards the end of the course. The students enjoyed seeing the preschool teachers 'in action' doing some of the things they'd been taught during the course. They also enjoyed seeing the children's reactions.

Student Council. A Student Council, consisting of two students, the national tutor, Peter Allan, and Steve Simpson and Gay Brown, met as needed to discuss any problem the students were having and to try to find solutions. This committee acted as a good liaison between the teaching staff, the Training Center staff and the students, and contributed towards the smooth running of the course. This group also helped to plan the graduation ceremony.

Social Committee. A Social Committee, consisting of three students and two tutors, organized a variety of weekend activities every second week. These included video, sports and a progressive dinner at the homes of various staff members. These activities provided good opportunities for staff and students to relax together informally.

IX. How this Course Differed from the 1988 Course

The 1989 Course followed closely the curriculum of the 1988 Course with the following exceptions:

1. The computer was used extensively in this course. Reading Readiness Books 1-6 for the Islands groups were put onto the computer and then stencils made on the printer. These computer disks are available for other Island language groups to use. This will be a tremendous time-saver for people beginning to plan for new

preschools. It also meant that more books of a much higher quality could be produced during the course.

Using the scanner, some of the story book illustrations were also put onto computer disks. Stencils were made on the printer and copies of the books given to the students for translation. This improved the quality of the books and has made the stories more accessible for other groups to use.

2. Some drawing lessons were given last Course, but this year, rather than just teaching the students to draw a number of isolated, unrelated objects, everything they drew was part of a series of illustrations for a children's book. By the end of the five lessons the students had each drawn a delightful story of a pig invading a pineapple garden. These sessions were put on video so that the ideas can be used in other courses even if an artist is not available to help.

3. More emphasis was given to the Multistrategy Approach to teaching reading. Mary Stringer, who designed this approach while working with the Enga Province Preschool Program, gave three mornings on the method, especially the Story Track.

4. The Teaching Aids sessions were more related to the actual reading process and books than we had done before. The activities followed the Whole Language/Language Experience approach.

5. Last year the students found it hard to keep track of all the activities covered. This year a chart (a ladder showing the different steps in a preschool program) was introduced early in the course and was referred to frequently throughout the course. This helped the students to 'visualize' where we were as each new topic was introduced. This provided a good overview of a year's preschool program.

6. The length of the Course was expanded from six to seven weeks. Such a lot is covered in the Course that the extra week was very helpful.

X. APPENDIX 1989 PRE-SCHOOL COURSE

SCHEDULE OF ACTIVITIES ACCOMPLISHED

Week 1. July 12 - 14	Week 2. July 17 - 21
	MON: Visual Discrimination Lessons -cont. How to plan a series of Visual Discrimination Books. Plan outline of 10 wks. program. How to draw illustrations for children's books. Teaching Aids.
	TUES: Visual Discrimination Lessons -cont. Layout. Detail plan for one Visual Discrimination Book (and group) Illustrating children's books. Teaching Aids
WED: Orientation Course Goals Why have a Pre-school? Meet tutors in groups. Penmanship Teaching Aids	WED: Continue preparation of Visual Discrimination Books. Demonstrate how to cut stencils, how to use silk-screen Illustrating children's books. Teaching Aids.
THURS: Demonstration of a whole morning's program at a Pre-school. Penmanship. Classroom Library: Instant Readers - what are they? Teaching Aids	THURS: Continue preparation of Visual Discrimination Books. Continue how to draw illustrations for children's books. Continue Instant Readers. Teaching Aids.
FRID: Reading Readiness - what is it? Visual Discrimination Lesson - demonstrate. Penmanship Teaching Aids	FRID: Continue preparation of Visual Discrimination Books. Silk-screening. Continue how to draw illustrations for children's books. Instant Readers - cont. Teaching Aids.

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Week 3. July 24 - 28	Week 4. July 31 - Aug. 4
MON: REMEMBRANCE DAY HOLIDAY.	MON: Alphabet Books. Continue to plan formal hearing activities. Instant Readers. Teaching Aids
TUES: Continue silk-screening, collating Visual Discrimination Books Instant Readers. Teaching Aids.	TUES: Oral Activities. Teachers' Guides for Reading Readiness Program. Time-Table/Schedule for Term 1. Continue with any group project. Instant Readers. Teaching Aids.
WED: Introduce Pre-Writing - Informal Activities: Finger Plays, Writing Patterns. Formal Activities - how to plan a Pre-Writing Course. Begin planning in groups. Instant Readers. Teaching Aids.	WED: Learning to Read Stage. Experience Charts - what are they? How to use them. Each group begins to work on Experience Charts. Teaching Aids.
THURS: Teaching children to read their own names. Continue planning Pre-Writing lessons. "News" books - a time for sharing. Instant Readers Teaching Aids.	THURS: The Two Tracks of Learning to Read. ① Story Track ② Work book Track. The Story Track - What is it? Experience Charts - continue working on these stories and illustrations Teaching Aids.
FRID: Aural Discrimination • Informal Hearing Games • Formal Hearing Activities Plan formal Hearing Activities in groups. Instant Readers. Teaching Aids	FRID: The Story Track in more detail. The 4 steps of the Story Track. Identify Cultural Themes for Term One Story Track. Teaching Aids

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Week 5 Aug. 7-11	Week 6 Aug. 14-18
MON: Story Track - cont. Demonstration of four steps of Story Track. Make a "Big Book" for Shared Reading Experience. - write cultural story. illustrate on large sheets of paper.	MON: Work Book Track-continued. Revision - at the beginning of all lessons - a special revision lesson each week. Continue to write and illustrate Story Track books. Teaching Aids.
TUES: Stages/Progression of Childrens Writing. Stories for Listening - write stories on Cultural Themes. Writing and illustrating Story Track books on Cultural Themes.	TUES: Continue Work Book Track. How to do Testing. Bridging into Grade 1. Continue writing and illustrating Story Track Books. Teaching Aids.
WED: Writing and illustrating Story Track books. Select one Story Track book and put it on stencils (work in pairs). Teaching Aids	WED: <u>Mathematics</u> in the Pre-school. An overview of what to teach in maths. Group ① - Make Literacy boxes. Group ② - Translate children's stories for Teacher to read to children. Teaching Aids for Maths.
THURS: Silk-screen one Story Track book - work in pairs. Continue writing and illustrating more Story Track books. Teaching Aids	THURS: Continue Maths. Lessons. Cultural Maths problems. Demonstration Lesson. Group ① Make Literacy Boxes Group ② Translate children's stories - cont. Teaching Aids for Maths.
FRID: Work Book Track. Four Lessons in the Work Book Track. Demonstrate Lessons. Continue writing Story Track books. Teaching Aids	FRID: Teaching Bible Stories. Work on any unfinished activity Group ① Making Literacy Boxes Group ② Translating children's stories. Teaching Aids.

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Week 7 Aug. 21 - 25	Week 8 Aug. 28 - 30
MON: Non-Literacy Subjects: Science - Nature Lessons. Plan Lessons to fit in with each cultural theme. Group ① Translate Children's stories. Group ② Make Literacy Boxes Teaching Aids.	MON: Classroom organization Classroom discipline Six monthly reports. Course evaluation by students. Clean up ready for Graduation Set up displays of books, charts, aids made during the Course.
TUES: Cultural Studies. Plan Lessons to fit in with each theme for Term 1. Group ① Translate Children's stories. Group ②. Make Literacy Boxes. Teaching Aids.	TUES: Decorate class room and Dining room. 10. am. Graduation Ceremony. 12. am. Mums.
WED: Health. Art. Out door Games Free Play Sessions. Group ①. Translate Children's stories. Group ② Make Literacy Boxes Teaching Aids	WED: Pack and Leave for home.
THURS: Music - singing, percussion, looking at cultural instruments. Planning all subjects to fit in with Story Track themes. Continue translating children's stories. Teaching Aids.	
FRID: Community Involvement. Fencing. "Road Map" - where are we now in planning? What still needs to be done? Continue translating children's stories. Teaching Aids.	

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PREDICTABLE BOOKS FOR PRELITERATE PEOPLES

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I. Introduction
II. Predictable Books, from the Point of View of
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I. Introduction

According to Webster, to predict means 'to declare in advance, to foretell on the basis of observation, experience, or scientific reason.' Predictable books are those books which are so written that the reader can foretell both what the author is going to say and how it will be said. Kenneth Goodman (1967.127) refers to prediction as 'the ability to anticipate':

> . . .reading is a psycholinguistic guessing game. It involves an interaction between thought and language. Efficient reading does not result from precise perception and identification of all elements, but from skill in selecting the fewest, most productive cues necessary to produce guesses which are right

> the first time. The ability to anticipate that which has not been seen, of course, is vital in reading. . .

Elsewhere Goodman (1972) speaks of the *'axiom of predictability:* a given sequence will be easy to read to the extent that what the reader is most likely to predict actually occurs. . .' (p. 153).

Frank Smith (1979) defines prediction as 'the prior elimination of unlikely alternatives. . . . More informally, prediction is a matter of asking questions' (p. 85).

Constance Weaver (1980) views a dichotomy between what she terms the *skills* approach to reading acquisition and the psycholinguistic emphasis on the development of *strategies*. She sees the former as a word-centered approach where children are encouraged to use their inventory of sight words, their knowledge of phonics and structural analysis skills, and only incidentally their knowledge of context, as aids in word identification. On the other hand, the meaning-centered strategies approach encourages prediction in that the beginning reader learns: 1) to predict the next item; 2) to sample the text (using a minimum of graphophonic cues); and 3) to use the following context to confirm or correct the original prediction.

Yetta Goodman and Carolyn Burke (1980.3-4) similarly suggest that the significant strategies a reader uses include: 1) Predicting, ('reader selects cues and predicts material'); 2) Confirming, ('reader checks semantic and syntactic acceptability'); and 3) Integrating, ('reader integrates meaning gained with his or her world view'). Goodman and Burke's third point is more comprehensive than Weaver's in that its focus is on what Rosenblatt (1978) terms the transactional nature of the reading process. Helen Dry (1983) simply describes the reader and the text as two halves of a whole.

Goodman and Burke (1980.10) go on to further clarify their view of prediction:

> A clear relationship between the language and meaning of the text, and the children's own language and knowledge, makes material predictable. The more this reading material reflects the whole and intensely meaningful language they use already, the more proficiently will they apply their accumulated language knowledge and world view to the construction of meaning.

For preliterate societies, this would imply that reading acquisition would be in the mother tongue of the aspiring learner. It may also suggest the need for materials which are linguistically and culturally within the experience of both the author and the readers. It has been found that readability formulas often do not accurately measure the difficulty of non-English materials. For this reason, Wendell along with colleagues in the Mexico Branch (1982.25-27) has proposed four stages as a means of judging the difficulty of such reading materials: Stage 1, content is completely familiar to reader and author; Stage 2, content is new to reader, however it has been experienced personally by the author; Stage 3, content is new to the reader and has been experienced only vicariously by the author; and Stage 4, content is new to reader and author, usually translated from another language by the 'author'. For a book to be truly predictable for the beginning reader it needs to be Stage 1 material so that the author and reader share not only the same language, but the same schema.

One could cite numerous other evidences from the field of reading theory which would point towards the usefulness of predictable books; however, it may be profitable to turn briefly for a look at some other disciplines and at what they have to say to the issue.

II. Predictable Books

A. - from the point of view of LINGUISTICS

For the past few years, those who are on the forefront of linguistic study (e.g., Halliday and Hasan, 1976; Grimes, 1975) have been looking at discourse structures. They have discovered that by looking at the structure of the whole, eventually the parts--even some of those parts which previously seemed unexplainable--begin to emerge as a meaningful part of the whole.

Much of the current work with story grammars has built on the foundation laid by those doing discourse analysis for English; however, more needs to be done in building on a knowledge of discourse when preparing reading materials for those languages which are only now being written down. It has been noted that in an effort to simplify materials, one of the first things many authors do is to remove many of the 'useless' function words. This actually removes much of the redundancy and robs the new reader of those cues to

prediction which he/she needs so desperately. Kenneth Goodman (1971) describes this phenomenon:

> If teachers doctor up language, if they select it in such a way that it turns out not to be language which is meaningful, or acts like language, then both the attempt to reconstruct the underlying language structure and the attempt to get at the meaning are frustrated and it becomes an experience in nonsense (p. 458).

It is time that reading specialists and/or literacy workers began to build on the insights which have come from discourse analysis.

B. - from the point of view of PSYCHOLOGY/PSYCHIATRY

Bruno Bettelheim (1976) speaking as an educator and child therapist states the need to go beyond skills training and to look at the whole:

> I became deeply dissatisfied with much of the literature intended to develop the child's mind and personality, because it fails to stimulate and nurture those resources he needs most in order to cope with his difficult inner problems. The preprimers and primers from which he is taught to read in school are designed to teach the necessary skills, irrespective of meaning. The overwhelming bulk of the rest of so-called 'children's literature' attempts to entertain or to inform, or both. But most of these books are so shallow in substance that little of significance can be gained from them. The acquisition of skills, including the ability to read, becomes devalued when what one has learned to read adds nothing of importance to one's life (p. 4).

He goes on to suggest that 'nothing can be as enriching and satisfying to child and adult alike as the folk fairy tale.' (p. 5). Later he goes on to describe the reason fairy tales are so powerful:

> The delight we experience when we allow ourselves to respond to a fairy tale, the enchantment we feel, comes not from the psychological meaning of a tale (although this contributes to it) but from its literary qualities--the tale itself as a work of art. The fairy tale could not have its

> psychological impact on the child were it not first and foremost a work of art (p. 12).

It may be that part of what makes folk tales an art form is the predictability of the story, i.e., the beauty of the pattern. In preliterate societies, folk tales are often the best source of predictable materials. In addition they are one of the most important means for passing on cultural values to the younger generations. Specific types of predictability may differ from culture to culture and language to language; however, the person preparing reading materials needs to be aware of some of the different patterns of folklore. Kenneth and Mary Clarke (Carlson, 1972, p. ix-x) clarify some terms used in referring to folklore:

> *Märchen* is a German term referring to stories of wonders in which lowly heroes win fame and fortune in an unreal world of improbable characters.
>
> A *fairy tale* is usually a story in which some supernatural force aids the hero or heroine in solving problems, e.g., Snow White and the Seven Dwarfs.
>
> *Myths* are often stories of gods and supernatural beings which explain natural phenomena, e.g., Why the Skunk Has its Odor.
>
> A *legend* is a story about persons, places, or events involving a real or pretended belief or person, e.g., King Arthur.
>
> A *fable* is an animal tale told with a moral purpose, e.g., Aesop's Fables.
>
> *Tall tales* are based on lies and exaggerations, e.g., Paul Bunyan.

An awareness of the different types of folklore may help the preparer of reading materials to make better choices as to appropriate stories--and to avoid those which could cause problems. It would be well to note some cautions from the country of Colombia (Kondo and Wendell, 1979.119-201), where the Yucunas have so many versions of a given story that persons cannot agree on any one version as being the right one. The Tucanos of Colombia believe that only the oldest man is able to tell the stories correctly. There is also some

fear that their tribal secrets may be disclosed. In other places stories may be too immoral or too gruesome for the general reader.

C. - from the point of view of ANTHROPOLOGY

Marvin K. Mayers (1974) contends that both individuals and societies may be placed on a values continuum between a dichotomizing and a holistic world view. Those on the dichotomizing end of the spectrum prefer that everything be black or white. They are interested in analyzing the parts and then want to know where the parts 'fit'. Those on the holistic side prefer to look at the whole. They focus on parts only when those parts are in vital function within the whole. They are frustrated by situations where there is a need to consider one part without respect to the whole.

The Copala Trique, an Indian group of Mexico, are a clear example of a holistic culture, i.e., one in which reading acquisition is best approached by focus on the whole:

> The Copala Trique consider language as a vehicle of communication. They do not consider it an object to be dissected, nor a toy to be played with. Informants have trouble slowing down their speech, or breaking it up into shorter chunks. They usually cannot answer any question that focuses on the linguistic form of an utterance, as opposed to its content. I have never heard a Trique make a pun or play on words.
>
> This view has important consequences for literacy. Triques regard any part of a meaningful utterance that is pulled out of context as unnatural and unpronounceable. Thus, syllable charts were intensely disliked and virtually impossible to teach, as were word drills that used verbs and adjectives in isolation. People constantly looked for meaning where there was none. My original syllable approach had to be abandoned in favor of an approach that stresses meaningful material in context (Hollenbach, p. 7).

In spite of the lack of documentation, it may be worthwhile to note that various individuals and organizations who are attempting to do literacy work among the Australian Aboriginal groups, have found that the best methods are those which build on a holistic view.

For the past few years, there has been debate in some circles as to whether or not the psycholinguistic view of the reading process is actually appropriate for beginning readers (cf. Whaley and Kibby, 1981). It would seem that evidence from reading theory as well as other disciplines definitely points towards the usefulness of a holistic approach even during the beginning stages of reading acquisition--at least in those cultures which are holistic in their world view. In such a situation where one must begin by focusing on the whole, the use of predictable books is one of the most advantageous ways of introducing the concept of reading to a preliterate people.

III. Predictable Books in Other Languages and Cultures

We turn now to some samples of the way predictable books have been used in other languages and cultures. These are presented in the hope that they may be but the seed of more creative applications.

A. VIETNAM. In English-speaking situations, the predictable book which is probably the most well-known is The Bus Ride, published by Scott, Foresman and Company (1971). The text is extremely predictable (and delightful):

> A girl got on the bus. Then the bus went fast.
> A boy got on the bus. Then the bus went fast.
> A fox got on the bus. Then the bus went fast.
> A hippopotamus got on the bus. Then the bus went fast.
> A goat got on the bus. Then the bus went fast.
> A rhinoceros got on the bus. Then the bus went fast.
> A fish got on the bus. Then the bus went fast.
> A horse got on the bus. Then the bus went fast.
> A rabbit got on the bus. Then the bus went fast.
> A bee got on the bus. Then! (Everyone got off the bus.)
> Then they all ran fast.

Doris Graham, in a December 1982 unpublished paper, experimented with an adaptation of *The Bus Ride* for speakers of the Roglai language of Vietnam. In her version, various animals climbed into a huge tree, then a snake climbed the tree and all the other animals jumped down and ran away. It should be noted that this is not a translation of the book, but merely an adaptation of the idea.

B. PHILIPPINES. One of the favorite books of the Northern Kankanay people residing in the village of Bogang, Mountain

Province, was the story of *The Duck That Ran Away From Home* (data from personal experience). It is possible that this story might be considered a fable in that it tells of a duck who got tired of swimming in his little pond day after day. One day he decided to go off to see the world. On his way he met three other small creatures each of whom was invited to join him (each cycle used identical language). The four finally reached the ocean only to discover that it was unpleasantly salty, and then a huge wave thoroughly drenched them. They climbed up on a rock and decided that, ' We've seen the land and we've seen the sea, and home in Bogang is the only place to be!'. Even though this story was translated from English and thus could have been quite difficult for the Northern Kankanay people to comprehend, yet the predictability of the story line helped them to enjoy it. It also seemed to speak to them culturally in that the audience that enjoyed it the most was comprised of the old village leaders who were quite concerned that all the young men were going off to seek their fortune in the 'outside world'. This underlines Bettelheim's view that such stories help to pass cultural values on to the next generation.

C. BOLIVIA. Marion Heaslip (personal correspondence) has done literacy work for a number of years among the Aymara-speaking people of Bolivia. Most of the classes have been in a church context and most of the students have been motivated to learn to read because of their involvement with the church. In April 1981, Heaslip decided to develop a primer based on the words of familiar hymns which the members of the literacy classes had already memorized. The primer was later published and has proven to be quite successful.

D. PERU. Patricia Davis (1981) used a local folklore story as the basis of the set of primers she constructed to teach reading to Machiguenga speakers. The concept of reading was foreign to the Machiguenga. This was complicated by the fact that, as is also true for North American Indian groups, verbs are more predominant than nouns and the verbs carry a great deal of affixation, e.g., *irapusatinkaatsempokitasanoigavetpaakemparorokarityo*, meaning 'probably-they-will-turn-right-over-into-the-water-when-they-arrive-but-they-won't-stay-that-way' (p. 272). The average length of Machiguenga verbs is twelve to eighteen letters, but verbs with twenty-five to thirty-five letters are common.

In order to simplify the reading task a folklore story was chosen for the primers. This was because of its familiar cultural concepts as

well as the natural vocabulary. The story was a trickster type myth, with each of the four primers in the series containing one trickster cycle. The simplified plot of the story in the first primer follows:

> There was a man who was walking through the jungle. He heard an armadillo which had climbed up a tree to chop down clusters of fruit, leaving his shell at the foot of the tree. Since this man was a trickster, he thought that it would be funny to smear the shell with a slippery substance. When the armadillo descended and tried to 'dress himself', the shell slipped off *soda*. But the man took pity on him, cleaned off the shell, and they became friends (Davis, 1981.269).

The second primer covers the next stage of the man's journey.

Before the students began the first primer, the teacher read the whole first cycle of the story to them. Davis recounts how 'High interest and motivation were aroused as students looked forward to learning to read the story for themselves.' (p. 267). This high motivational value may be the best reason for considering the use of predictable books. It has often been noted that motivation is the most important factor in determining to what extent a literacy program will fail or succeed.

IV. Conclusion

For English, predictable books can be recognized as such because of their repetitive pattern (on any level of the linguistic hierarchy from discourse to word level), their familiar concepts, and their good match between text and illustrations (Rhodes, 1981). More analysis is needed to determine if for other languages and cultures, there are universal features which make a book predictable.

Kenneth Goodman (1972) describes the predictability of sequential constraints as follows:

> Given any single language element, the possibilities of which elements may follow are highly constrained: some may follow, some may not, some may but are unlikely. Given a string of elements, the constraints become much greater. Hence, language is highly predictable; particularly with regard to grammatical structures. . .(p. 153).

The factors which make a book predictable may include: 1) repetition of sequence; this may be a repetition of actual words or rhyming words, or it may be a repetition of activities such as found in the typical trickster cycle (Radin, 1956); 2) cumulative sequence, e.g., 'This is the house that Jack built. . .'; 3) familiar cultural sequence, e.g., 'One, two, buckle my shoe. . .'; 4) chronological sequence, e.g., 'On the first day of Christmas, my true love gave to me. . .'; 5) problem centered sequence, e.g., 'The Little Red Hen'; and 6) rhyme-rhythm sequence, which should especially be considered in Southeast Asia where rhyme is so important psycholinguistically that some dictionaries have been done based on rhyme instead of the usual alphabetical order. Several of the above types of sequence can be seen in the first stanza of the poem 'Over in the Meadow' (Weaver, 1980.215):

> Over in the meadow
> in the sand
> in the sun
> Lived an old mother turtle and her little
> turtle one.

Here one sees repetition of the actual words *in the* in the first three lines. There is alliteration in *sand* and *sun*, and rhyme in *sun* and *one*. In terms of cultural expectation the idea of turtles sunning themselves would be more familiar to a Seminole child in Florida than to a Tlinket in Alaska. Thus we see prediction working on the level of the reader's schema (i.e., expected activities of turtles), as well as on the lower level of the rhyming sounds in *sun* and *one*.

If what Bettelheim says about the need for culturally relevant literature which speaks to deeply felt human predicaments is important to this society with its wealth of environmental print and written literature, how much more important for those societies which see nothing to be gained from reading, or worse, who have learned to read in a language they do not understand and feel reading is nothing more than pronouncing syllables. As Kenneth Goodman states regarding those who have been taught with a skills emphasis (as in most third world countries):

> In countries with extensive literacy instruction, there are far more people who can read to some extent but don't than there are people who can't read at all. There are even people who read well enough to become highly educated who seldom read anything for their own pleasure. For them, there

> is no pleasure in reading.... Response to literacy instruction will certainly be proportionate to the value and need.... There will be significant differences in the relative degree to which literacy instruction is accepted (Goodman, 1977.312-13).

Since prediction is such a vital part of the reading process, this is a plea that more work be done to find appropriate vehicles in preliterate societies which will encourage the beginning readers to develop the skill of prediction. The use of appropriate predictable materials will enable them to experience the joys of reading which can come only when one is able to move directly from text to meaning.

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READING WITH RHYTHM: A HELP IN TACKLING LONG WORDS

Barbara J. Sayers, SIL
Australian Aborigines and Islanders Branch

Barbara became a member of SIL in 1959 and has been involved in the Wik-Mungkan translation program in Australia. She has taught at the South Pacific SIL course, and is a linguistics, translation and program consultant in the Australian Aborigines and Islanders Branch.

I have recently been looking at some publications in Australian Aboriginal Languages, in which words of seven to nine syllables are common with a significant number having ten or more. This reminded me again of the difficulty new readers have when trying to read words of great length.

I would like to share an experiment I tried when teaching young adults to read Pintupi some years ago. I was on loan to The School of Australian Linguistics, and one of my tasks was to improve the students' literacy skills. As a nonspeaker of either Pintupi or Warlpiri, the two languages spoken by the students, this was difficult. I found that being able to accurately pronounce individual syllables was not much help. The students could never recognise the words when I pronounced them syllable by syllable, so there was no hope of reading with meaning. While trying to solve my problem I remembered a previous experience when I was working with a translator on the Iwaidja language. The phonetics of that language is very complex, but I 'learned' a number of very short texts which I could read to the people and get a good response. The 'learning' involved mastering the rhythm and timing--while the phonetic segments were often glossed over. The extremely good response of the hearers was a great encouragement and that experience led me to my experiment with Pintupi.

My aim was to try to work out the rhythm and timing of the words to see if the students could recognise them. One of the assumptions I worked with from my Iwaidja experience (Sayers and Pym 1977) was that long words were made up of rhythmic segments of two or three syllables and, in Iwaidja at least, the boundaries were of more importance than the stress placement. From this experience I tried segmenting the Pintupi words into groups of two and three

syllables. When I hit the right arrangement the word was instantly recognised. I would then make a mark at the boundary of the segments. With this marking it was easy to guide the students to read the words by these rhythmic groups rather than by individual syllables. It worked well for those students and their word attack skills were greatly improved. An added bonus was that I could also read anything so marked to the satisfaction of Pintupi speakers. One advantage of this method is that even if the rhythmic segments are related to morphology, an understanding of the morphology is not necessary for meaningful reading.

Recent experience with Turkish at the Field Methods course at SPSIL has added to my conviction that this method works. Once I have heard a Turk read Turkish and I have marked the rhythmic segmentation I can then read back to him with understanding. These rhythmic boundaries are the natural places where one can pause when trying to figure out how to pronounce a long word--or even take a breath. If these natural breaks are not used the reading becomes stilted and lacks meaning. Thus either the meaning component of reading is ignored or the beginning reader has to try and try again to make sense of the long words. Michael Christie (1982 and 1983) recognised this problem with Aboriginal children's reading when he talked about 'ritual reading' which lacked 'phrasing' with the result that meaning was largely ignored.

My attempt to get rhythmic segments marked has to date not been seriously tried. Many of my coworkers were convinced that they could not 'hear' these groupings and so were not too keen to try this method. Faith Hill, working at that time with Tiwi, was one notable exception and her enthusiasm was a great encouragement. She pointed out that some of these rhythmic groups did not have stress on the initial syllable of the group, so teaching from stressed syllable to stressed syllable was a hindrance rather than a help. It is also possible that rhythmic segments such as SŚS (S stands for syllable) could reflect tension between the phonology and the morphology. Others outside SIL have tried this method to a limited extent but I have not seen a serious attempt to use it in languages with very long words.

Those of us who are mother-tongue speakers of English are used to stress-timed rhythm[1] and often have difficulty recognising English words when the timing is wrong, for example, sýllable versus sylláble

or different, as the Australian versus American pronunciation of words such as 'territory' and 'controversy'.

(tʰérə.tʰrì) Australian (tʰérə.tʰòri) American

contróversy Australian cóntroversy American

(´ stands for primary stress, ` for secondary stress and . for rhythmic group.)

If this is our own experience we should be willing to attempt to teach reading in another stress-timed rhythm language with the correct rhythm. When words are sounded out syllable by syllable it is the equivalent of syllable-timed rhythm.[2] This, unfortunately, is what results when we pronounce long words with each syllable receiving the same stress and amount of time.

My hypothesis is that in some languages these rhythmic segments are of more relevance than syllables, at least they are more easily recognised than syllables by some. This is especially the case when rhythmic segments do not have the first syllable stressed, for example they could be S̀S or S̀ etc. rather than only ́SS or ́S. If the teacher groups syllables from one stressed syllable to the next it leads to added problems. This is more of a hindrance than even-timed syllables, as wrong borders could be introduced. Tiwi and Iwaidja are examples of this phenomenon.

A further problem with syllable borders also arises in some languages where, for example, a CVCVC pattern is not necessarily divided into CV CVC. This occurs if the medial C functions in both syllables, as it does in words of ́S̀ stress pattern in Wik-Mungkan (Sayers 1977).

For beginning readers of a stress-timed rhythm language the marking of these segments should be a big help in word attack. In many cases it is possible to link these segments with the morphology and this should be investigated. Even where a morphological link exists it is not necessarily the whole story as, for example, we know that in English different stress/timing relates to the same word being used in different word classes, for example, cónflict (noun) versus conflíct (verb). If these rhythmic segments are related to the morphology, the understanding of either system can help with understanding the other one. However, from my experience, the beginning

reader is more likely to respond to something that sounds 'right' than to a recognition of the morphology.

Needless to say I would be greatly interested to see someone working in a language with very long words give this idea a good try and then write up the experience for the benefit of others.

Notes:

[1]Stress-timed rhythm: Cadences characterized by a tendency to the recurrence of stress at more or less uniform time intervals without regard to the number of syllables between stresses. (Pike 1947: 13a, 250)

[2]Syllable-timed rhythm: Cadences characterized by the tendency for syllables to recur at more or less even time intervals without regard to the number of sounds in the syllable or the number of stresses in an utterance. (Pike 1947: 13a, 251,2)

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SOME PRACTICAL APPLICATIONS OF THE GLOBAL APPROACH TO GUDSCHINSKY MATERIALS

Wanda Pace

SIL, Sudan

Wanda became a member of WBT/SIL in 1966. After three years of teaching MK's in Mexico, she worked for five years on literacy materials in Comaltepec Chinantec and a related Chinantec language. In 1977 she received an M.A. degree from the University of Texas at Arlington, and then proceeded to Sudan. There she helped prepare literacy materials in cooperation with the Institute of Regional Languages, and was heavily involved in teacher training and writers' workshops. From 1985 until the present time she has been working with a mother-tongue translator on translation into the Ndogo language.

There has been a good deal written in the past ten to fifteen years on the fact that people approach learning or problem-solving from one of two basic approaches--a more analytical or field-independent approach, or a more global or field-dependent approach. In my own reading on this subject, I have tried to learn particularly about the global or field-dependent style of thinking and learning. That is because I feel that the cultural values of a number of the ethnic groups I have worked with in southern Sudan predispose them toward this style of thinking, just as many of the cultural values of Western countries predispose us toward an analytical style of thinking.

In preparing primers for use in the schools in Sudan, we have used the Gudschinsky method, which is quite analytical in approach, and I have had the opportunity to observe the kinds of difficulties which both teachers and children have had in using these materials. I would like to see us work toward developing materials which are less one-sided in their approach and can thus meet the needs of both analytical and nonanalytical learners.

Below I state seven principles or generalities about the global learning style which I have gleaned from my reading. For each I have tried to think of some practical ways in which we may apply that principle to our teaching of reading. Because our work in Sudan has largely been in the primary schools, these suggestions are related to the teaching of children in particular.

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1. Provide an overview, show the 'big picture' before the details; emphasize the usefulness of what is being learned and its relationship to the total task; give general concepts.

a) Give plenty of practical examples of what reading and writing are, and their usefulness. (Remember that the children do not come from a literate society where this is implicit knowledge!)

b) For each letter being taught, discuss words with that letter which are meaningful to the children. In Sudan we now use an 'alphabet book' as a prereading tool which lends itself well to this purpose.

c) Teach only built words which will be used in story material, leaving out (at least in early stages) the list of words which are given only for word-attack or 'sounding-out' practice.

d) Try to think of some concrete analogy from daily life to compare the analytical part of reading to, e.g., comparing the words of a sentence or the sounds of a word to something like beads on a string or beans in a pod.

2. Start from a meaningful whole and break it into parts rather than starting with parts to build a whole.

a) Use experience charts and sight-word (global) stories, and from these pick out individual words to learn. Perhaps one may even want to teach the story part of a lesson first throughout the primer series, which would give more background to the teaching page and its drills.

b) Drop the syllable-building drills in early lessons or for young children. Those drills require rearranging the original material which was taught, and discovering something new by oneself, both of which are analytical skills.

c) Do not do syllable-by-syllable word building, but rather use a whole-part-whole approach (e.g., kutuku ku tu ku kutuku).

d) In the drill boxes, drill only previously taught words and not nonsense syllables in languages that have many one-syllable words. In lining up drills, keep in mind that global thinkers find it easier to see similarity than difference.

e) Teach new built words with either an illustration or some kind of context. (Note that if the story is taught first, the words will automatically be in a context.)

3. Personalize the material.

a) All reading material should be set in the cultural setting, with characters who continue throughout the series.

b) Writing practice should be words or sentences of interest to the children or of relevance to the story which was read, not composed merely to practice certain letters.

c) Encourage discussion about the words being learned and about the events covered in the reading material, including teacher-read folk tales relating to the words. This strategy should be used especially in the early stages.

Note: Part of the reason for the popularity of the Laubach method of relating letter shapes to animals or objects may stem from this principle.

4. Model the task

a) Especially at first, the teacher should do plenty of reading of folk stories and other materials in front of the class, to model what reading is.

b) The teacher should model the writing, not just show a sample.

c) The teacher should read the words or the story before asking the children to do it alone. This may perhaps be modified later in the learning process.

d) The teacher should model the whole-part-whole approach to word attack until children know how to do it alone.

e) Supplementary reading material could be put on cassettes for individual or small-group use. (Perhaps for adults the entire reading series could be put on cassettes for use after class.)

f) Rely more on demonstration than on written instructions when training new teachers how to use the books.

6. Provide structure, explicit directions, clear expectations; state rules and principles explicitly.

a) Provide teachers with detailed lesson plans and instructions. Be sure they know what they are teaching in each part of a lesson. Thus they can also state it explicitly to the children as they feel it necessary.

b) Keep the structure of the lessons basically the same throughout.

c) Make explicit the important principles for reading, based on a concrete analogy. Some of these principles, which at least the teachers need to know explicitly, are:

- Words are composed of sounds, and these sounds are represented by marks or signs which we call letters.
- Each sound has (should have!) its own mark or sign, which is always the same.
- Whenever you see a word you do not know how to read, you can break it into its sounds and put it together again to hear what the word says.
- If you know all the marks or signs for all the sounds in your language, you can read and write any word in your language.

7. Encourage a personal relationship between teacher and pupils, and give positive external rewards for success; do not rely wholly on internal self-motivation or desire to succeed.

a) Suggest rewards such as helping the teacher, helping others, taking books home to read to the family, supplementary books to read with or without cassettes, reading to younger groups, etc.

b) If an impersonal teaching approach has been taught in the teacher-training institutes, discuss the pros and cons of the two approaches with the teachers you are training and see if they feel that changes toward a more personal approach can and should be made.

WHY THE 'GUDSCHINSKY METHOD'?

Dorothy M. Thomas
SIL, Thailand

Dorothy was equipped with a BS degree in elementary education and an MA degree in missions. She became a member of WBT/SIL in 1955. Her first assignment was in the Philippines, where she became Mrs. David Thomas. She later obtained an MA degree in linguistics. She and her husband served with the Chrau people of Vietnam, and since 1977 they have been in Thailand where they completed the translation of the Chrau New Testament and are presently working with the Northern Khmer language group. For the last three years, Dorothy has been teaching literacy methods at Mahidol University in Bangkok.

I. Introduction
II. Linguistic Aspects
III. Learning Styles
IV. Pedagogical Aspects
V. Conclusion

I. Introduction

Q.1 Why did Freire's method work so well in Brazil?

Q.2 Why did Laubach's method work so well in the Philippines?

Q.3 Why did Gudschinsky's method work so well in Vietnam?

A.1 Because Freire was in Brazil.

A.2 Because Laubach was in the Philippines.

A.3 Because Gudschinsky was in Vietnam.

The 'Gudschinsky Method' has come in for a lot of criticism lately, so the question naturally comes, "So who needs Gudschinsky?" My answer is, "We all do," for the reason that it covers most of the bases.

We have always given lip service to the principle that the method for teaching reading should suit the particular language, as well as the local learning style. What Gudschinsky has done is to articulate the different kinds of problems in learning to read and present methods to reach each of them.

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II. Linguistic Aspects

It is no accident that the full Gudschinsky or 'combination' method was developed in Vietnam, where most of the languages are either Mon-Khmer languages or have been in contact with Mon-Khmer languages so long that they have acquired many of their phonological and morphological characteristics. These characteristics are: large consonant/vowel inventories plus irregular distribution of phonemes, complicated syllable structures, different syllable types, short words of one or two syllables, and extensive use of short, unstressed function words. Compare word structures like (C(C)V) +C(C)(S)V(C) and inventories of fifteen to twenty-three consonants and twelve to seventeen basic vowels, often multiplied by length and/or voice quality or tone, with languages with words of great length built from C(S)V(C) syllables and inventories of fifteen to nineteen consonants and four to five vowels.

Lee says (p. 19) that theoretically there are 25,000 possible syllables in Roglai, a Malayo-Polynesian language in Vietnam, although *only* a few thousand actually occur! In contrast, think of the fantastic successes that Freire (Portuguese) and Laubach (in a Malayo-Polynesian language of the Philippines) had with teaching all the syllables and immediately having lots of buildable words. Both men happened to develop their methods in languages with very limited phoneme inventories, simple syllable structures and plenty of words of varying lengths that can be built from just a few syllables. Learning all the possible syllables in the whole language is not a big chore in such languages.[1]

Speakers of the Mon-Khmer type languages are very much aware of phonemic contrasts. Slips of the tongue are frequent even among native speakers, and good for many a laugh for years to come. Word games are great favorites. (In Southeast Asian 'pig-Latin' the final VC's of two words are switched to make a joke or to hide an unpleasant truth.) Rhymes are also fun because they are not so common. So contrast drills make sense in these languages. Believe it or not, they are fun, too! The Chrau teacher-trainees in Vietnam loved to shout out the next syllable before I could write it on the board. (They had learned to read in Vietnamese by chanting 'b-a ba, b-e be, b-i bi', etc. through the alphabet, so the contrast drills were a new thing to them.) Never mind that they hated the functor drills. They needed those, too. (Their problem may have been because writing the drills on the board was still too much of a chore for them.)

A haphazard approach to reading in such languages is bound to leave a lot of questions in the minds of students when they meet a new pattern or symbol. With so much structure to learn, they need a structured approach, at least to the extent of a careful record to see that all the possible symbols and syllable types have been thoroughly covered.

On the other hand, the Mien of North Thailand and the Karen of western Thailand[2] agreed to hate contrast drills. Both languages are monosyllabic and have very few final consonants. (Karen languages usually write what is phonemically nasalization on a vowel as a final consonant.) But the Karen loved the functor drills! Actually, Gudschinsky herself (p. 42) warned that very complete syllable drills would be counterproductive in monosyllabic languages. How much more so if most of the syllables are open.

Khmu' is a typical Mon-Khmer language in Laos and Thailand. Elisabeth Preisig reports (private communication) that Khmu'-speaking refugees now living in France accept the contrast drills but refuse nonsense syllables in the drills, so she has to make abbreviated contrast drills for them.

So literacy teachers need to know the linguistic 'whys' as well as the 'hows' of various types of drills and adapt their methods accordingly.[4]

III. Learning Styles

Much has already been said about cultural learning styles, but the fact remains that illiterate societies may need to develop new cognitive skills in order to be fully literate. Learning to read and write is different from learning to make a crossbow or to cook rice.[4] So some-where along the line new learning skills must be taught. We can do much to cushion the shock, but we must remember that the act of reading is a radical change and requires some exercise. The beginning reader needs all the help he can get, whether it is experience charts, keywords, flashcards, analogy drills, reading in unison, or whatever. If we ignore some of the skills needed in reading because they are not normal skills used in the culture, we do so at our own peril.[5] Even languages with small syllable inventories frequently have complex affixation which needs to be learned by analogy, not just by memorization (Lee, p.18). And although the Chrau disliked the functor drills, it was quite obvious that they

needed them from the way they stumbled over the functors if not taught as functors.

IV. Pedagogical Aspects

Kutsch Lojenga (1986) has faced us with the problem that preparation of carefully structured materials is not easy. It may be that if a different approach is in current favor we will have to be patient and wait to see if a short-cut method will work. If it doesn't, we may be called in to help later. It should be possible to go along with a functional approach, for example, and use both the global method for connected material and a structured approach to keyword drills for each lesson, gradually building up word-attack skills, along the lines of the Cates' sewing-Bible study-trade language lessons. (1981)

If the combination method is used, its very regularity is an aid to both lesson writing and teaching. Actually, newly-literate native speakers can be trained to write stories with limited symbols (Shand, 1974, Waller 1974, and Gudschinsky, 1973). One tribal man at a workshop in Vietnam went to the office while the linguist was gone, looked at the list of phonemes taught and those still to be taught, and wrote the next lesson all on his own.

V. Conclusion

As Margaret Bendor-Samuel (p.42) says in regard to the rather negative evaluation given to the Sudan Gudschinsky-type primers, "The evaluation will have served us well if it drives us to reconsider the Gudschinsky method. Where it really serves us well let us take heart and make adaptations as needed. Where it would be better to fit into a different approach because of the context of the *program* (italics mine), let us be creative..." And it may be that adaptations are needed because of the language. Let's know what we are doing and why.

Notes

[1]Doris Porter also found that the phonic method works very well in Philippine languages.

[2]Personal communications from Wanda Jennings, WBT, and Rosemary Griffiths, formerly of New Tribes Mission.

[3]For example, please see Pace, NOL 60.

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[4]Ong has quoted much research concerning both historical and modern situations, showing convincingly that literacy itself introduces completely new thinking processes into previously strictly oral cultures. Even the switch from hearing to seeing language is a dramatic change. See especially Chapter Three, 'Some psychodynamics of orality', and Chapter Four, 'Writing restructures consciousness'.

[5]Evans (p. 53) noted that although Barai students who learned to read by the language experience approach had better comprehension and fluency than those who learned by the eclectic (Gudschinsky) method, the latter group did better in spelling and dictation, which are also necessary skills. (One wonders if the eclectic lessons may have been overly heavy on the syllable drills and the '...few lines of connected material...' (p. 49) were too few.)

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RENDILLE UPDATE

Lynn Ziegler
SIL, East Africa Group

The Rendille are a vibrant nomadic people who bring color to the almost colorless Kaisut desert. These people have an uncanny sense of pride and self-confidence. I had the privilege not only to observe the work in which the Swanepoels and Pillingers are involved but also to attend the first writers workshop, in which the Rendille were introduced to a standard form of writing their language for the first time.

The emphasis during the two-week workshop was threefold, the first being to introduce and get feedback from the carefully chosen orthography; the second was to introduce good writing techniques, creating quality writers; the third, to get some well written, publishable stories.

It was exciting to see the enthusiasm of the participants. Despite the fact that half of those who had shown an interest in the workshop were stranded due to impassable road conditions and couldn't come, there were still around twenty at each lecture. It appeared that many of them were surprised at how complex their language really was and maybe weren't prepared, at first, for the intricate orthography being presented. But as the days went by they became more and more convinced that double consonants, double vowels, and tone markings were all necessary in order to be able to read Rendille fluently.

Some of the participants really proved to be very good writers and produced some excellent materials. Altogether, there were three writing assignments: One was to write down a folk tale, another was to create a story from a real life experience, and the last was to write up something about their history, checking the facts with an elder of the community for accuracy.

The end of the workshop showed that many were still struggling with the orthography, but it's just a matter of time before it starts becoming second nature. Of those who attended, nineteen received certificates, meaning that they had attended most of the classes and had written all three of their assignments (and some had written more).

The decision was made to have weekend orthography workshops over the next few months for those who had missed the first one, as well as for others interested. Weekend meetings would give those in school an opportunity to attend as well. Also plans for a regular newspaper were made, thus providing a suitable way to circulate these stories and stimulate a desire to read.

Notes for contributors: Readers are invited to submit letters of comment and/or publishable materials to the editor of NOL at **The International Linguistics Center, 7500 W. Camp Wisdom Road, Dallas, TX 75236.**

Computer media: Contributors who have copies of their manuscripts on magnetic media such as 5.25" diskettes in PC/MS-DOS format are urged to submit the same along with their manuscript.

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No. 64, 1990

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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

International Academic Bookstore

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
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SIL INVOLVEMENT IN BILINGUAL EDUCATION

PAST - PRESENT - FUTURE

Anne Klaassens, May 1989

Anne has a BA in education, and has had three years of teaching experience in Ontario, Canada. She worked for a year as a church developer in the Philippines with Christian Reformed World Missions. Anne became a member of WBT/SIL in 1989, and has completed SIL training in literacy.

I. History
II. Chart of Details

I. History

SIL's involvement in the field of bilingual education can be traced back to its founder, Cameron Townsend. He recognized from the very beginning that the mother tongue is the best medium for beginning education, whether it be with children or adults. Under his leadership, SIL participated in the Mexican government bilingual education program for Indian groups, which was established in the 1940's. Working with the National Indian Institute, SIL provided materials for schools and training for the teachers.

In 1952, SIL got involved in bilingual education in a second country, Perú. The Peruvian project continues to be the largest bilingual education project undertaken by SIL in cooperation with a foreign government. SIL translators assist the local communities in selecting suitable persons from the language groups in which they have been involved, to be trained as teachers. At the summer training sessions, the training is done in Spanish and the translators who speak the trainees' languages tutor in the mother tongues whenever necessary. From the very outset of the program, nationalization was the goal. Today, Peruvian Indians (many of whom have been through the bilingual education program themselves) are serving as coordinators and supervisors. SIL serves only to facilitate the program.

From Perú, SIL's involvement spread to Ecuador, Bolivia, Brazil, Guatemala and Colombia, as the governments of these countries began to address the issue of mother tongue education.

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From Latin America, bilingual education involvement spread to Asia, beginning in Vietnam. In 1964, the government of Vietnam invited SIL to participate in their new vernacular education program for the Highlands. With monetary assistance from the United States Agency for International Development, SIL, headed by Sarah Gudschinsky, developed materials in four languages at a massive workshop in 1967. (See the chart for more details about these materials.) A teacher training program was begun, involving two hundred and twelve teachers in the first year. Because of war conditions and the expulsion of linguists and missionaries, there were some disruptions in the program; however this also brought about early nationalization of the program and lack of dependence on outside support. From all indications, the bilingual education program in Vietnam is still going strong.

In smaller ways, SIL has been facilitating bilingual education in Australia and the Philippines through technical assistance, materials production, and teacher training. A larger involvement has developed (and continues to grow) in Papua New Guinea. In the early 1980's, Graeme Kemelfield of the University of Port Moresby visited the North Solomons Islands to examine the possibility of bilingual education there. The people of these islands had had Mother Tongue education back in the 1930's when Catholic missionaries had provided it. When English became the language of instruction in Papua New Guinean schools, the adults recognized that a part of their culture was being lost. In the late 1970's and early 1980's, they began to demand vernacular education for their children. Kemelfield went to the area to hear their complaints and examine the possibility of vernacular preschools. He asked SIL linguists in the area to assist in a small vernacular preschool program. Its success right from the beginning has led to vernacular preschools throughout the country, spreading first to other islands, then to coastal provinces, and finally into the Highland interior. The motivation for wanting Mother Tongue education varies. On the islands and coastal areas, the people are interested in maintaining their language and culture. In the Highlands, however, the people are interested in economic advancement and desire vernacular preschools in order to help their children succeed in school and hopefully go on to better jobs.

SIL's involvement in Papua New Guinea ranges from small, isolated projects to full-scale province-wide programs. (See the chart for more details.) The branch is presently in the process of defining their official policy towards bilingual education involvement. Their

commitment to the National Literacy Unit, a government committee set up to research, survey, and implement language and education policies, seems to indicate that involvement will grow in years to come.

In more recent years, bilingual education has come to some areas of Africa. In some countries, such as Nigeria, Ghana, and Zaire, the only concession to bilingual education that has been made is to allow a 'vernacular period' in the schools. SIL has made contributions in these countries in the form of materials and literature for use in these vernacular periods.

There are several larger-scale projects underway, also. In 1973, the South Sudanese government invited SIL to participate in a bilingual education program with technical assistance, teacher and writer training, and materials production of many kinds (primers, transition materials, bridge materials, etc.) In 1977, the Institute of Regional Languages, a Sudanese counterpart to SIL, was set up. Because of civil war conditions, much of the work has been suspended, especially that of foreigners. Trained Sudanese have continued some of the work, but the war has been very disruptive to education in general.

Another project which SIL has become involved in on a larger scale is the PROPELCA program in Cameroon. It is a project of the University of Yaoundé, with technical assistance from SIL and funding by CIDA (Canadian International Development Agency). Work in nine languages has begun, with hopes to extend to more minority languages. SIL is involved in Adult Education in these nine languages as well.

The governments of Mali, Togo, Senegal and Côte d'Ivoire are very much interested in vernacular education; there is a possibility that SIL may become involved in bilingual education.

By reading these introductory comments and by glancing at the accompanying chart, one can see that SIL involvement in bilingual education has a variety of manifestations. There are older programs, such as Vietnam, Ecuador, and Bolivia, where SIL involvement has been almost phased out. There are countries where SIL's contributions have been limited to providing vernacular materials for use in the schools, such as Zaire, Nigeria, and the Philippines. Teacher training has also played a part in Australia, Sudan, and Brazil. Then there are countries, such as Cameroon and Papua New Guinea, where SIL is involved not only in materials production and

teacher training, but also in program planning and technical assistance on a large scale.

It is hoped that the material presented, especially the chart, will give a helpful overview of SIL's past, present, and potential for future involvement in the field of bilingual education around the world. I found very little written by SIL members and had to rely mainly on oral interviews. It is hoped that as our involvement increases, so will our documentation of programs for others to read.

II. Chart of Details:

THE ROLE OF SIL IN BILINGUAL EDUCATION:
PAST – PRESENT – FUTURE

LATIN AMERICA

(comp. = compulsory; l.o.i = language of instruction
B.E. = Bilingual Education; M.T. = Mother Tongue)

México (six years comp.; l.o.i. = Spanish; limited B.E.)

- as early as 1940's, SIL was involved in materials production and teacher training for B.E. in cooperation with the Ministry of Education and the National Indian Institute. Materials in at least twenty languages have been produced.
- Mexican government encourages transition to Spanish as soon as possible once MT literacy is attained.

Perú (six years comp.; l.o.i. = Spanish plus three years MT instruction in villages)

- one of SIL's most extensive programs.
- began under guidance of Cameron Townsend.
- 1953, first teacher training course held in Yarinacocha; 16 teachers trained (11 approved), representing 5 language groups. Each teacher returned home to build a schoolhouse and begin instruction. Children learned MT literacy (with SIL-constructed primers), arithmetic, oral Spanish with flash cards.
- now, average of 250 teachers at each summer training course. The course is staffed primarily by the Ministry of Education, with assistance from SIL. Six summer sessions are normally required to receive B.E. certification.

- SIL involved in materials production: textbooks, primers, teachers' manuals for Spanish instruction.
- 1985, 15,000 students in 400 B.E. schools in 24 language groups.
- new thrust is into the Highland Quechua area.
- Peruvians are full-time supervisors of schools.

Guatemala (six years compl.,not enforced; l.o.i. = Spanish plus MT instruction)

- indirect involvement with materials production, teacher training, teaching of B.E. courses at the university level.
- 1980 to 1984 - two SIL members worked with Guatemala's Ministry of Education to assist with curriculum development for their B.E. project.
- B.E. materials were produced in four languages for Grades Prefirst to Fourth. There are 400 public B.E. schools using these materials.

Brazil (eight years comp.; l.o.i = Portuguese)

- SIL involved in MT materials production and teacher training for at least ten language groups, in cooperation with FUNAI (Brazil's national agency for Indian affairs).
- plans for greater involvement.

Colombia (five years comp.; l.o.i. = Spanish; official policy of B.E., but not a reality)

- SIL's involvement is in cooperation with FRESCI, a private organization which helps minority peoples with legal matters and education.
- at request of community and FRESCI, SIL helps with teacher training, materials production, program planning.

Bolivia (eight years comp.; l.o.i. = Spanish)

- SIL has been involved in teacher training and materials production in at least nine different languages.
- program has been largely nationalized.

Ecuador (six years compl., not enforced; 50% attendance; l.o.i. = Spanish)

- SIL (was) involved in materials production and teacher training in cooperation with the Ministry of Education (began in early 1960's).
- training held each summer in Limoncocha. Teachers return each year to upgrade own skills and get teaching credentials.
- program has been largely nationalized.

AFRICA

Cameroon (six years compl.; l.o.i.= East - French, West - English)

- SIL involved in the **PROPELCA** program, an initiative of the University of Yaoundé, funded by Canadian International Development Agency. SIL's involvement is seen as 'scientific and technical'.
- began in 1983 with private schools in four language groups, then extended to five others. Future plans include more languages and incorporation into more public schools.
- SIL involved in vernacular materials production and yearly teacher-training sessions. Teachers attend three sessions, twelve to fifteen days each, at Yaoundé.
- as of 1987 there were 1835 students in B.E. schools in the first four language groups, 1200 students in the other five extension languages, and over one hundred teachers trained.

Sudan (nine years compl.; l.o.i.= North: Arabic, South: English, rural: some MT education)

- SIL began work in B.E. in 1973 with South Sudanese government.
- involved in vernacular materials production, teacher training, writers' workshops, bridge materials to Arabic and English.
- because of civil war, much work has stopped. Some trial editions are still being used extensively, as are some bridge materials into Arabic.

Ghana (ten years comp.; l.o.i= English, some MT education in villages)

- MT education is a local decision.
- SIL involved in materials production as early as 1975.

– SIL work is under the auspices of GILLBT, the Ghana Institute of Linguistics, Literacy, and Bible Translation.

Zaire (six years compl.; l.o.i. = French)

– SIL has been involved in MT materials for use in the 'vernacular periods' in primary schools. There has been some success in providing Scripture booklets for use in religious instruction in the schools. These are in the MT for the first four years and in the trade language, Kiswahili, for the upper grades.

Kenya (not comp.; l.o.i. = English)

– minimal involvement; some materials production.

Nigeria (six years comp.; l.o.i. = English; three regional languages)

– SIL was involved in MT materials for 'vernacular periods' in primary schools.
– largely nationalized.

ASIA AND THE PACIFIC

Vietnam (five years comp.; l.o.i. = Vietnamese; B.E. for Highlands)

– 1966, SIL was asked to help prepare materials in four languages (previously only the national language was used in education).
– 1967, Sarah Gudschinsky, SIL and C&MA (Christian and Missionary Alliance) missionaries worked on primers and materials for B.E. in a 'primer grade' (MT literacy and oral Vietnamese) and Grade One (transition to Vietnamese).
– funding by USAID allowed for production of many textbooks, wall charts, wordless arithmetic books, teachers' manuals, etc.
– program involved MT teachers for first two years of primary education.
– 1969 - 212 teachers trained in SIL workshops.
– teacher-training school established in Banmethuot.
– 1971 - first materials came out (delayed by war).
– as of 1975, sixteen languages were involved in B.E. program. Funding now comes from government and religious organizations.

- war conditions (and expulsion of SIL) make evaluation difficult. Personal accounts indicate that the programs are continuing with much success under national supervision.

Papua New Guinea (not comp.; l.o.i. = English, possibly MT component in Grades 1-6)

- SIL involvement in B.E. began in early 1980's. SIL was asked to help in a trial vernacular preschool program in the province of North Solomons.
- After favorable results in the North Solomons, the vernacular preschool idea spread to other islands, Madang, Enga, Oro, the Sepik, and into the Highlands.
- SIL is involved in vernacular materials production, primer construction, bridging and transition materials, teacher training , research and survey.
- Feb. 1987 - first training course for Tokples Education Workers held at Ukarumpa - twenty-two participants from eleven provinces.
- there is a great variety in SIL involvement. There are some very structured programs with a great deal of SIL input (Enga, Oro, Chimbu) and many places where small, unstructured work is taking place.
- three SIL members are part of the National Literacy Unit, a government committee to research, survey, and train teachers for nationwide B.E. in Grades One and Two.

Australia (nine years comp.; l.o.i. = English; B.E. for Aboriginals)

- 1972 - Australian government launched a campaign for Aboriginal MT primary education.
- SIL was asked to assist as field consultants, and in teacher training and materials production. By 1980, SIL was involved in twelve languages with this type of assistance.
- Australian program includes one year of MT literacy and instruction followed by two years of transition into English. The MT remains a subject of instruction for the rest of elementary schooling.

Philippines (six years comp.; l.o.i. = English/Filipino, Grades 1-3 some MT)

- minimal involvement in B.E.

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– some MT materials production for use in schools.

Indonesia (six years comp.; l.o.i. = Bahasa Indonesia, some regional languages.)

– there is a recent proposal to begin involvement in B.E. in Indonesia.

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'DONT'S' FOR TEACHING LITERACY

In the Literacy Corner of the March 1990 issue of Adult Education and Development, published by the German Adult Education Association, (Deutscher volkshochschul-verband, fachstelle für internationale zusammenarbeit, Rheinallee 1, D-5300 Bonn 2, Federal Republic of Germany) there is an annotated list of DON'TS for teaching literacy. The list without the annotations is presented below. For further information write to: Campaña Nacional de Alfabetización Monseñor Leonidas Proaño, Ministry of Education, Quito, Ecuador.

A catalogue of DON'TS for teaching literacy

1. Don't impose our ways of thinking and acting on the group.
2. Don't treat your learners like children.
3. Don't make all the decisions in the management of the class.
4. Don't do all the talking.
5. Don't seclude information relating to the teaching process.
6. Don't forget that self-effort is the key to learning.
7. Don't correct constantly.
8. Don't encourage individualism and competition.
9. Don't force the pace of teaching.
10. Don't exaggerate the importance of prewriting exercises.
11. Don't teach your learners to read the names or sounds of the letters.
12. Don't teach syllables in a set order.
13. Don't resort to reading by syllables.
14. Don't give homework.

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RAISING THE PRESTIGE OF A CREOLE LANGUAGE: AN AUSTRALIAN EXAMPLE

John Sandefur

John obtained a BA degree in missions from LeTourneau University in 1971 and joined the AAIB of WBT/SIL in 1972. In 1973 he began working with the Kriol speaking Aborigines; he married Joy (nee Langsford) in 1976, and obtained a MA degree from the Anthropology Department of the University of Western Australia in 1985. He and Joy completed the New Testament translation and also a third of the Old Testament in 1989. They resigned from WBT/SIL in 1990 and are now living in Melbourne, Australia.

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II. Basis of Assignment
III. Government Attitude
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I. Introduction

Some fifteen years ago thousands of Aborigines in North Australia spoke no language fluently. The situation was the end product of what has generally been a massively violent contact between whites and blacks throughout Australia, contact which resulted in the decimation and dislocation of the Aboriginal language groups. The violence came to an end in the mid-twentieth century when the Australian government began pursuing a policy of assimilation designed to turn the Aborigines in essence into black whites. Under this policy all vestiges of Aboriginal culture and language were despised and to be eradicated. Aborigines were strongly encouraged—and in many respects forced—to take up residence on reserves, missions and government settlements where they could undergo a form of reeducation.

Today some 30,000 Aborigines living in 250 Aboriginal communities in the three states of Northern Australia fluently speak, some as their first language and others as a second, a language defined in the constitution of the recently formed Aboriginal Language Association as a 'modern' Australian Aboriginal language

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(now known as Kriol). Three schools (government, Catholic and independent) use this language formally, both orally and in written form, in their education programs and several other schools operate de facto oral programs. Over four hundred titles have been published in the language, and an increasing number of Aborigines are publicly identifying with the language.

What has brought about such a phenomenal change and who has taught these thousands of Aborigines in North Australia to fluently speak this new language? The answer to the latter question, of course, is simple – nobody has taught it to them. They have been speaking it for decades, in fact as a first language for four generations in at least one community.

In the first section of this paper, after the introduction, I will detail the basis for my assignment to Kriol and also previous investigation of the language situation. In the second section I will briefly describe the government's attitude to the use and development of the language, especially looking at the historical lead-up to my assignation. In the third section I will provide a very brief description of the attitude of Kriol speakers before the SIL project was started, and the changes that have occurred during the last fifteen years. In the fourth section I will seek to answer the question of what caused these changes, focusing especially on practical activities that may have applicability to other similar SIL projects. In the last section I will describe some of the involvement of local people in the various aspects of the project.

II. Basis of Assignment

As a new member of WBT/SIL, my assignment led me to Australia, and to speakers of Kriol, in the Roper River area of the Northern Territory. Only two months previous to my arrival in Sydney, Ray Wood had undertaken a general language survey of the Roper River area of the Northern Territory and had found the pidgin English to be so strong and widespread that he recommended that SIL should not only regard the language as worthy of an SIL project but that 'some priority' should be attached to it. Consequently, the director assigned me to undertake an initial two-month survey of Roper Pidgin.

Just exactly what sparked my interest in Roper Pidgin I do not know. No doubt Wood's survey report was very instrumental in helping me to consolidate my decision. My having to overnight with

the Sharpes in Brisbane on my way to Darwin was also significant. Margaret was a former member of SIL, assigned to a traditional language in the Roper River area. In the late 1960's she lived for two years in the very community in which I now have lived since early 1973. Without doubt conversation with her was instrumental in encouraging my interest in pidgin, for while she was working on Alawa she became so aware of the significance of Roper Pidgin that she reported on the language to the government department in charge of Aboriginal affairs, in an attempt to gain recognition for the language. In conjunction with a local missionary, Margaret had prepared a Pidgin primer and had held informal literacy classes.

By the time I began my survey of Roper Pidgin in early 1973, the sociopolitical situation relevant to Aboriginal languages, as will be discussed in the next section, had significantly changed from what it was when the director had assigned me to undertake the survey. Later in the year, on evaluation of my survey report, the Branch (AAB, now Australian Aborigines and Islanders Branch of SIL) gave me a permanent assignment to the language, although many of my colleagues questioned the wisdom of SIL's becoming involved with 'bastardized English'. The surveys carried out by Wood in 1972 and myself in 1973 showed that the language had undergone creolization and was thus a creole and not a pidgin, and that it was spoken as a first or second language by some 2,000 Aborigines throughout the Roper River area, an area comprising one town, two Aboriginal settlements and about two dozen cattle station communities. The language eventually became known as Kriol.

The SIL Kriol team was enlarged to two when Joy and I married in 1976. For the first six years of the project we considered the language to be restricted to that initial area and all Kriol activities were limited accordingly. We had had some indications (e.g. correspondence with non-SIL linguists doing salvage research to the south and southeast of the Roper River) that Kriol was spoken beyond the Roper River area, but it was not until we carried out surveys in 1979 in Western Australia and in 1980 in Queensland that we fully realized that Kriol was spoken by at least 20,000 Aborigines in 150 Aboriginal communities scattered over a million square kilometers.

What had prompted our survey in Western Australia was the persistent request of a senior SIL team, Eirlys Richards and Joyce Hudson, who had begun working on the Walmajarri language in 1967. About the time I was being assigned to the AAB, they noted the

presence of a pidgin in the Kimberleys and suggested to SIL that it be looked at. In 1974 Jill Fraser was given a six week project of looking into the pidgin spoken by children at Fitzroy Crossing where Joyce and Eirlys lived. At that time my wife-to-be, Joy, was working in the Fitzroy Crossing area, having been assigned for three years as a literacy worker with the Walmajarri project.

As we were assessing the full implications of the Western Australia survey findings, we had a visit from the Area Director. He recommended, for a number of reasons, that the Kriol translation project be given special attention, with the assignment of additional personnel as needed.

Since the 1979 Western Australian survey, Joyce Hudson and Eirlys Richards have found themselves almost involuntarily involved in some aspects of the Kriol project, with Hudson writing her Master's thesis in 1981 on grammatical and semantic aspects of Kriol. Annette Walker was assigned in 1982 as literacy specialist in the Kriol team. With the assistance of short-termer Judith Knowles, Annette has set up operations in Halls Creek, about a thousand miles by road west of where Joy and I live, and has responsibility for the sixty or so Kriol-speaking Aboriginal communities in the Kimberley region. Dave Glasgow carried out a general language survey in 1983 that confirmed the presence of Kriol throughout the Barkly Tableland region of the Northern Territory, but provided no linguistic data. We likewise have no linguistic data for the Victoria River district nor for communities in the Top End of the Northern Territory. In spite of the need for further surveys and linguistic data collection and analysis, Joy and I embarked on full-time translation in late 1984.

III. Government Attitude

The attitude of the various Australian governments towards Aborigines for our purposes here can best be described in terms of three phases: annihilation, assimilation and aboriginalization.

From the very beginning of the white settlement of Australia in the late 1700's almost until World War II, the basic effects of government policy was the widespread maltreatment and decimation of Aboriginal tribes, with the survivors being dispossessed of their land and moved into reserves and mission settlements. Within half a century of white settlement all Victorian languages had become extinct, with the decimation of the coastal languages of South Australia, New South Wales and southern Queensland rapidly

following. It was during this period of violent contact that numerous pidgins arose across Australia. They were followed by creolization around the turn of the twentieth century among children from the culturally and socially dispossessed tribes of the Roper River area who came to reside at the newly established Anglican Roper River Mission.

Public sentiment towards Aborigines began to change in the 1930's and pressures were brought to bear on the Australian government to change its policies. After the interruption of World War II, the government instituted an assimilation policy in which the Aboriginal people were materially cared for, but their traditions including language were neglected and even directly or indirectly suppressed. The policies were designed to turn Aborigines into English speakers distinguished from other Australians by the color of their skin. All vestiges of Aboriginal culture were to be suppressed and eradicated.

The planned assimilation of Aborigines into the white-Australian society did not take place, and government policy began to show signs of change again in the late 1960's. A national referendum in 1967 brought citizenship to Aborigines. The elimination of legal discrimination and the amelioration of the general Australian attitude towards Aborigines brought with it a massive change towards Aboriginal acceptance of identity, with Aborigines becoming proud of their origin and anxious to assert it. It was no longer derogatory to be an Aboriginal nor a sign of deprivation to speak an Aboriginal language. People of mixed descent who had previously totally denied or tried to deny any connection with their Aboriginal background began to stress their Aboriginality. The policy changed in the late 1960's and the self-determination and self-management policies of the early 1970's have led to the handing over to Aborigines or Aboriginalization of settlements and missions, with Aborigines largely determining and directing their own affairs.

The changes in government policies in the late 1960's and early 1970's combined with the rise in Aboriginality set the stage for the tremendous changes in the social standing and acceptance of Kriol noted in the introduction. It is possible to isolate two very specific events that functioned as the catalyst in actually instigating these changes. The first of these events was the Australian government's announcement in December 1972 that it was instituting a bilingual education policy under which 'Aboriginal children living in distinctive Aboriginal communities (could be) given their primary education in

Aboriginal languages.' The second significant event, which had taken place a few days prior to the government's announcement, was my assignment by SIL to look into the pidgin situation at Roper River.

The direct result of the government's new education policy was the establishment of a Kriol bilingual education program in the school at Bamyili. This program was not established without opposition from education department personnel, both locally and departmentally. After over ten years of operation, opposition towards the program continues and the department has officially recognized only three communities with schools as being Kriol-speaking communities. An indirect result of the government's policy has been the granting of authority to other government departments to utilize Aboriginal languages, resulting in some Kriol translations of government materials. A cumulative effect of the government policy has been to lend recognition to Kriol and Kriol speakers, thus helping to raise the prestige of the language and building positive attitudes in its speakers.

Because of the close cooperation between SIL (specifically, John and Joy Sandefur) and the government (i.e. the education department, or more specifically the Bamyili school upon which the brunt of implementation of the government policy fell) it is difficult to separate many of the language activities of the one without reference to the other. Some general differences are notable, however. SIL language activities have been very widespread and broadly based whereas the education department's have been very localized. While both have been heavily involved with Kriol speakers, the department has focused almost totally on the one community of Bamyili whereas SIL works directly with Kriol speakers in about a dozen communities on a regular basis and has periodic contact with speakers in several dozen other communities. We have also directed language activities toward the wider Australian population as well as mission and church entities, both white and aboriginal.

IV. Kriol Speaker Attitudes

When the SIL Kriol project began, the attitude of most Kriol speakers toward Kriol, then known at best as pidgin, was much the same as that of most whites – it was nothing but a bad form of English. In an attempt to teach the Aborigines English and eradicate pidgin, some white teachers reputedly physically punished the Aboriginal children when caught speaking pidgin in school. The language was, therefore, for the most part an underground language,

with the main sociolinguistic rule being 'no Kriol with whites'. That is actually an oversimplification of the situation. In the view of older people who speak a traditional language as their first language and Kriol as a second language, Kriol **was** English. Such people would use Kriol with whites, thinking they were speaking the white man's language. By contrast, younger, more English-sophisticated Kriol speakers tended to be the ones who viewed Kriol as something other than proper English. Very few of them, however, viewed it as a language in its own right and most seemed to agree, at least publicly, that it should be eradicated. They were faced with a dilemma, though, for it was only through Kriol that they could fully communicate with the older folk.

When I first went to Roper River very few people would speak Kriol to me or in my presence. Old Wallace Dennis, however, caught on to what I was about and not only freely used it with me but also publicly fussed at others for not using it with me. As a result, others, too, began speaking it to me. One of the principles I learned in those early days was that the presence of a white person suppresses the expression of Kriol. This fact was highlighted for me during my second survey that first year. On my first survey I was accompanied by three Kriol speakers and I collected a stack of linguistic and sociolinguistic data, whereas on my second survey I went by myself and found out hopelessly little. As a result I realized it was essential to have a Kriol speaker as the front man in most language activities.

The change from an almost totally negative to an increasingly positive attitude towards Kriol has taken place during the last two decades not only among Kriol speakers themselves but also among many nonKriol-speaking Aborigines as well as whites. In the late 1970's, for example, when the Aboriginal Languages Association was formed, some of the Aboriginal organizers wanted Kriol to be excluded from consideration. After a presentation by a Kriol speaker, however, recognition was granted to Kriol in view of the Association's own definition of Aboriginal languages in its constitution. The Association and most, although not all, Aborigines in the Association have since supported Kriol speakers in their bid to raise the social standing of their language.

Substantial changes of attitude from very negative to acceptance and even to advocacy during the past two decades are also clearly evident among whites. Well into the early 1970's most linguists in Australia considered Kriol to be nothing but fools' play; it was described in such terms as 'not a structured language that could be

described as a linguistic system...' but just 'a broken jargon of corrupt English...'. Kriol could be seen to have gained an acceptable place in academia as a whole in 1980 when R.M.W. Dixon included a few serious pages on the language in his book *The Languages of Australia*. Most missions had followed the leading of the linguists and government in having 'no tolerance of pidgin' language policies. Some missionaries continue pushing such policies, but since the mid-1970's most mission societies working among Kriol speakers have given some form of recognition to the legitimacy of Kriol.

V. Practical Language Activities

We now come to the question of what practical activities have helped bring about the changes mentioned in the preceding section. I will focus here primarily on the practical activities carried out by SIL. (For details of the activities of other entities, see the appendix to my Master's thesis.) This is not to say that our activities have been more significant and influential or important than those of other entities. Our activities by themselves could in no way have brought about the massive changes of the past decade. By the same token, however, many of the language activities of others have been related and interdependent with our activities, often with our functioning in a catalytic and encouraging role.

The Kriol bilingual program at Bamyili school is a prime example. Following the announcement of the new government policy at the end of 1972, the education department held inconclusive talks with the Bamyili community on the issue of using Kriol in the school. Holt Thompson, the new principal, was initially 'dead set against it' but a few months later, after deciding he had to take some form of action to improve the performance of the school, reversed his position.

At the beginning of the next school term, Dorothy Meehan arrived. Dorothy had taught for several years in Papua New Guinea and thus very quickly assessed the Kriol situation at Bamyili. She saw the applicability of a bilingual program but was well aware of the massive resources required to develop a full program. With the principal's support she discussed the issue with the education department. Because of the reservations they expressed and because of the amount of resources that would be needed, she was on the brink of deciding to forget any idea of pushing for a Kriol program. When she heard that SIL had committed itself to a translation project in Kriol, however, her direction was reversed. Reasoning that SIL's

fifteen year commitment would support and supplement a school program, the school decided to implement a bilingual education program. SIL did nothing directly to influence the decision to implement a Kriol program at Bamyili. However, the services of SIL had been offered to the education department when the bilingual policy was announced, and the SIL director was serving on a bilingual advisory committee to the department. My role at that stage was feeding grass roots information on the language situation to the education department initially via the SIL director. I was also asked on several occasions by the department to participate with them in meetings at Bamyili and Roper River on the bilingual education issue.

Giving the language a specific name has had an immeasurable influence in raising its status as a language in its own right. One of my most exciting moments came on our survey of the Kimberleys in 1979 when I was showing a Kriol book with the name Kriol on the cover to a Kriol speaker I had just met. When he heard the name he commented that he had sometimes wondered what the name of his language was. Credit for the name Kriol goes to the Bamyili school principal, Holt Thompson. Knowing that the term pidgin would work to the detriment of the school's bilingual program, he declared that in the Bamyili school the language would be called 'Creole'. The term pidgin was banned from official use, although no attempt was ever made to prevent Kriol speakers themselves from using it. When an orthography was developed for the language, its name was spelled accordingly (i.e. Kriol instead of Creole). We have since set out to intentionally spread the name, primarily by displaying it prominently on the cover of every Kriol book we have produced, and also by encouraging its use in the technical literature. We have met with good success, for the name is spreading currently, not only in print but also orally among Kriol speakers. On a few occasions writers have used the name to refer to any creole in Australia, and I have taken it upon myself to gently inform them of this wrong usage.

I proceeded with the normal tasks of any SIL project—getting to know people, learning the language, collecting and analyzing data. Australian Aborigines are accustomed to being studied by anthropologists and recorded by linguists, because of their interest in the traditional. I was unusual for I took their everyday speech seriously, and many of them sensed that very quickly. Several were intrigued and impressed that I could write Kriol, one to the degree that the second month I was there he insisted that I teach him how to write it. As I look back now I see in that experience my initial

realization that the written word has a profound influence upon the status of the language.

Literature production began in 1976. Our basic strategy called for the production of Kriol books with a high quality appearance as well as flooding the communities with literature. We have succeeded more in the first instance than in the latter. We have produced a number of full-color books. As far as we have been able to judge, these have had more influence in raising the prestige of Kriol among whites than among Kriol speakers themselves. Producing much literature, which is essentially an attempt to make as many Kriol speakers as possible aware of the existence of Kriol literature, seems to have several effects. One is to raise the literacy rate among Kriol speakers. There are a large number who can read English, with varying degrees of fluency and comprehension. We have found that many Kriol speakers can extend their reading skills from English to Kriol with very little if any assistance – if they have access to literature. Another effect, which is true of Kriol literature in general, is that the written form of Kriol distinguishes it from English and helps Kriol speakers realize that their language is not English, but is a language in its own right.

We have not been very successful in flooding Kriol country with literature. Only a handful of the 250 communities have been flooded, and some of them, as far as we are aware, have never seen any Kriol books. Distribution of vernacular books in the AAIB system is by selling. We have tried to get Kriol speakers and missionaries and several other whites to sell books, all without much success. Unless we are present to encourage them, very few books get distributed. Because of the limits on our time and lack of personnel, book distribution tends to be very slack. A strategy that would reach every community without a large expenditure of time would be mailing literature to every community free of charge. Socially this would not be detrimental, for Aboriginal communities are continually receiving literature from various government and Aboriginal organizations on just such a basis. Financially such a scheme would be less expensive than distributing the books personally because of the high cost of fuel consumed in visiting the communities. So far, however, such a strategy has not been implemented.

Our activities and perspectives are much broader than those of the Bamyili school, and, for that matter, of most people and entities working with Kriol, including Kriol speakers themselves. This is evidenced in the development of the Kriol orthography. Most people

want to produce Kriol literature in an orthography specific to their dialect. Of the eight groups or entities that have published literature, most have viewed it as being produced only for their local area. On the other hand, Joy and I have been involved in the production of practical material for all Kriol speakers. An outgrowth of this activity has been the development of an informal role that I would call information liaison officer. We spend a lot of time informing people involved in Kriol bilingual programs and the production of Kriol materials about what others involved in those same activities are doing. For example, our only direct connection with the school program at Turkey Creek in Western Australia is a half-day visit maybe two or three times a year. We tell those involved what has been going on in the Northern Territory, give them a copy of materials they may not have seen, see what they have been doing, and get copies of their materials to show to others. We continually remind such people of the thousands of Kriol speakers outside of their communities who could benefit from their labours. In the midst of all this liaison work we have constantly pushed for uniformity of orthography and standardization of spelling rules in an effort to insure compatibility of materials. In pursuing this aim we have published and circulated several papers as well as several bibliographies and resource guides of Kriol material.

Toward the end of the 1970's the Bamyili Kriol bilingual program was running smoothly. Our knowledge and understanding of the language situation had been greatly expanded. The general sociopolitical milieu had significantly changed from what it had been when I was first assigned to Kriol. So we decided it was time we told the world about Kriol. We set about to make Kriol a household word throughout Australia. Our primary means of doing this was by publishing. We have written over four dozen articles, some for the linguist, but most for the educated layman. We have published them in a variety of journals and magazines, in a deliberate attempt to inform a broad spectrum of people about Kriol. I have also presented, sometimes in absentia, papers at half a dozen conferences. With the exception of the Aboriginal Languages Association conference, however, I have not been satisfied with the level of interest aroused, considering the expenditure of time and stress involved. Most of the conference participants are interested primarily in theoretical issues. So far there has been little evidence of practical application stemming from these conferences. On the other hand, many of our publications are received by people in Aboriginal communities, and have a direct effect that we can observe. We have

continually encouraged others to write and publish also, for the broader the literature base is, the harder it is for anti-Kriolists to discredit the validity of Kriol as a language.

One of the catchwords for Joy and me is innovate. Our biggest venture in innovation is the use of video. Most schools in Kriol-speaking communities have had video equipment for several years, and with the advent of relatively inexpensive home video players we could foresee their proliferation in Aboriginal communities. As a result Roy Gwyther-Jones, director of the media department of the Australian Home Division, undertook a 'pilot project' for us in 1981 and produced a dozen Kriol video programs. Some of these were in Kriol for Kriol speakers while others were for English-speaking audiences. The program that proved to be, as far as we can judge, the most influential and widely distributed was a half-hour program on the Bamyili school program. In 1983 Gail Forbutt, a Northern Territory school teacher, took a year's leave of absence for scriptwriting, filming and editing. With her and Roy's help we produced a forty episode series of half-hour Sesame Street-type programs in Kriol, the aim of which is to enhance the self-image and dignity of Kriol speakers, reinforce their literacy skills and help raise the prestige of their language.

VI. Local Involvement

One of the basic principles under which we have operated is that we encourage the people themselves to take responsibility. Or, stated another way, if a project is to be lasting, the people must consider it to be their project, not ours. This is not to say that we never instigate any language activities or that we never operate outside that principle. We often do, with differing degrees of balance on each particular activity depending on a host of subjectively evaluated factors.

Let me provide some examples. The publishing of articles mentioned above has been carried out almost totally by ourselves. It has been directed primarily toward nonKriol speakers. In general when results are to be achieved among Kriol speakers, their involvement is essential. Our role in the latter activities is primarily as catalyst, technical advisor and encourager. Right from the start, however, I have been encouraging whites to write about Kriol in an attempt to spread the source base of information about Kriol. In the last few years, with the advent of the Aboriginal Languages

Association which attracts Aboriginal participants to its conferences, and in conjunction with the general rise in Aboriginal awareness of and concern about research into their own affairs, and Kriol speakers' increasingly public identification with Kriol, we have begun to encourage Kriol speakers to write articles about their own language. Our effort to date has shown some results but obviously much more effort must be expended before Kriol speakers will do it on their own.

Kriol speakers in general, as well as the whites who deal with them, are aware of their language as a language and the prestige of the language is definitely on the rise. The place of Kriol in education is pretty well established now and schools no longer critically need our assistance. The number of people involved in Kriol language activities and the projects on which they are working have increased to the point that it is impossible for us to be aware of everything going on as we once were. Reference to and recommendations concerning Kriol are beginning to occur in too many journals and magazines for us to keep track of them. In other words, our aim of making Kriol a household word is showing signs of fruition.

In the matter of the first 350 items published in Kriol, seventy-six percent have been published by the Bamyili school press and only ten percent by SIL or WBT. SIL has helped, however, in various aspects of the preparation of about twenty-five percent of those 350 items. Our role in the authorship has been so minor that only half a dozen bear our name as author or coauthor. In most cases our role has been to instigate the project and edit the final manuscript.

As to the distribution of books, when we travel we normally carry a box of Kriol books and cassettes. We generally give away some as payment in kind at every opportunity, finances allowing. We also sell them if the situation lends itself, having any Kriol speaker who might be traveling with us do the actual handling of books and money while we stay in the background. At Roper River where we live, our normal routine is to sell books through the Aboriginal church, which had the practice of selling English books as part of its outreach ministry. The church clearly sees that as their ministry, but they rely heavily on us informally for maintaining and organizing their stock. We also continually encourage people informally (i.e. over a cup of tea, never in public nor at council meetings) to take a box and go sell.

Throughout our time of working on the Kriol project we have resided at Roper River, or, more specifically, at Ngukurr on the

Roper River. Ngukurr is home, even though we average only six months out of the year there. As a result we have developed a deep relationship with people there and a regular and significant involvement in the local church. We have had very little involvement in the local school, most of our school time having been spent at Bamyili four hours by road west.

VII. Conclusions

What conclusions, then, can be drawn from this Australian experience? I would like to highlight here the points that I think have been or are of particular significance to our situation.

I think two main ingredients have directly acted on the Kriol situation to bring forth substantial positive growth out of that early 1970 sociolinguistic melting pot – the Bamyili Kriol bilingual school program and the concurrent Kriol translation project. Both ingredients have combined to bring about the rise in the prestige of Kriol during the past two decades, and the work and effect of the latter cannot be separated in reality from that of the former.

For our part I think a broad spectrum approach to public relations could be said to have been the most important watchword – cooperating with the education department in developing their bilingual program, spreading Kriol books across as much of Kriol country and to as many Kriol speakers as we could, spending time with Kriol speakers and taking their language and culture seriously, getting others to become involved in Kriol, publishing papers on Kriol to reach a wide audience.

The basic principle of grass roots activities dealing with people within Kriol country has been to put Kriol speakers to the forefront. It is not always possible, but the further a project progresses the more we try to withdraw into the background.

I think we have also maintained flexibility. We believe in green light thinking. The watchword here is innovate. While not disdaining the work of others, we have not been hesitant to try new approaches.

Lastly, we have spent a lot of time determining strategy and setting goals. However, once determined and set we do not feel constrained by them. As the situation has changed we have reevaluated our strategy and reset our goals. It is time now to move away from public relations towards directly serving the Kriol speaking churches, a move that involves a significant shift in thinking, planning

and acting, but which also brings us at long last to the specific task we initially set out to undertake.

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LITERACY LESSONS

'Literacy Lessons' comprises a series of forty pamphlets, each of approximately sixteen pages. They are produced by the Unesco International Bureau of Education within the context of International Literacy Year. The issues are published by the Unesco International Bureau of Education, P.O. Box 199, 1211 Geneva 20, Switzerland.

The manuscripts, prepared by eminent authors, cover a broad range of topics, subjects and countries. Certain 'lessons' are based upon national or regional experiences; others seek to explore policy alternatives; still others are accounts of various aspects of theory or practice, or, in certain cases, of personal experiences in teaching or learning. The documents are available in English and French.

Some of the exemplary titles are the following:

International Literacy Year: opportunity and challenge, by Federico Mayor, Director-General of Unesco.

Adult Literacy as educational process, by Raja Roy-Singh.

Literacy training of migrants and of their families and cultural identity, by Jean Valérien.

Regional Programme for the Eradication of Illiteracy in Africa, by Baba Haidara, Unesco Regional Office for Education in Africa.

International co-operation in literacy: two good examples, by Agneta Lind (SIDA) and Mark Foss (CODE).

Ethiopia: the role of literacy instructors in changing attitudes, by Gudeta Mammo

Literacy for survival and for more than mere survival, by H.S. Bhola.

Literacy in minority languages: what hope? by Clinton D. Robinson.

Illiteracy and poverty, by Malcolm S. Adiseshiah.

The contribution of volunteers to literacy work, by Rao Chelikani and Rahat Nabi Khan.

How to prepare materials for neo-literates, by Taichi Sasaoka.

Post-literacy: a pre-requisite for literacy, by Bernard Dumont.

A SKETCH OF SIL-PREPARED BILINGUAL EDUCATION MATERIALS IN PERUVIAN AMAZONIA

Barbara Trudell with Martha Jakway

SIL, Perú

Barbara has worked in the Perú Branch of SIL since 1982,in both literacy programs and literacy administration. Martha, an elementary school teacher by training, has been involved in the Peruvian bilingual education program since 1965. She is at present the Branch consultant for bilingual education materials.

I. Introduction
II. Materials
1. Reading and Writing
2. Spanish as a Second Language
3. Mathematics
4. Science
5. Curriculum Guide
6. A Comparison

I. Introduction

The purpose of this paper is to describe the materials presently used in the Peruvian Ministry of Education bilingual education program, in which SIL has been heavily involved since the program began in 1953. Approximately twenty-six language groups of the Peruvian jungle participate in the government bilingual education program, each using materials developed by SIL in its own language. All of these materials are subject to approval by the government education office before being published. The materials have evolved over the years, adapting to new government regulations and the results of testing in bilingual schools.

The typical Peruvian jungle bilingual school teaches Grades One through Six. The materials SIL helps to provide cover Grades One through Four in the subjects of reading and writing, Spanish as a second language, natural and social sciences, and mathematics. Grades Five and Six make increasing use of Spanish textbooks; transition to exclusively Spanish materials is complete by Grade Six.

Two factors form the basis of the SIL-developed bilingual materials. One is that elementary schools in the jungle are *escuelas*

unitarias--they have fewer teachers than grades, and so a teacher is usually responsible for teaching more than one grade. In fact, he frequently has all six grades under his supervision, depending on how rural or small the community is. This situation has important ramifications for materials design, since the teacher has to accommodate up to six classes in the same subject.

The other factor is that bilingual Indian teachers usually have less Spanish ability and less education than their *mestizo* counterparts who teach in nonbilingual schools. The overwhelming advantage of the bilingual teacher is that he is a native speaker of the language of the community; but this also means that his experience in the Spanish-speaking educational system is probably limited, and his level of Spanish fluency low. For these reasons SIL's emphasis in the jungle materials is on adherence to regular patterns which, once mastered, allow the teacher to effectively present each lesson in an entire series of books.

II. Materials

1. Reading and writing

The method used in the SIL-prepared reading series is called *global mixto*, and represents a compromise between the Gudschinsky method and the *global-silábico* method favored in Peru since 1972. The key sentence and syllable emphasis of the *global-silábico* method are combined with the functor treatment and word emphasis developed by Gudschinsky; the result is intentionally eclectic, in order to accommodate as much as possible trends in reading methods in the national education system. Each lesson of the *global mixto* method can boast extensive treatment of individual words, syllables, grammar and connected reading.

The reading series has three stages: *aprestamiento* (prereading), *iniciación* (presentation of all the syllables of the language), and *afianzamiento* (graded readers). The prereading stage consists of two books, both to be completed early in first grade: *Mirar, Pensar y Hacer* (Look, Think and Do) which is the same for all language groups, and *Vamos a Leer* (Let's Read), which uses words in the final lessons and so is language specific. The *iniciación* stage consists of two or more books, depending on the number of syllables to be introduced and the book size desired. This stage begins in First Grade and continues through Second Grade. *Afianzamiento* begins in

Third Grade, and is made up of five or more graded readers, to be used at least through Fifth Grade.

Most language groups involved in the jungle bilingual education program follow the above pattern for their reading series.

The utility of having all language groups' materials conform to one pattern is most readily seen in the yearly teacher training courses. Teachers from many different language groups are trained in the same course (conducted in Spanish) to use the materials in their language. The principal disadvantage of this kind of teacher training is that occasionally the linguist must either be on hand to help the bilingual teacher who has less Spanish ability, or choose more bilingual (and perhaps culturally marginal) teachers. For most of the groups involved, however, linguist help is not necessary at the teacher training stage. This yearly teacher training is an important aspect of the program, and uniform materials allow a limited number of literacy specialists to effectively accomplish training for many language groups.

Writing is taught along with the reading lesson, with writing lessons written into the reading book. Printing is taught in first and second grades, and cursive writing instruction begins in the third grade book. This sequence was developed to conform to government requirements of the 1970's. At the present time, however, the trend in national texts is to teach cursive writing from first grade on; this could prove to be an area of dissatisfaction with SIL-prepared materials in the future.

2. Spanish as a second language

Spanish as a second language (SSL) has been part of the bilingual education curriculum since the program's beginning in 1953. The content of the SSL course is modelled on government curriculum objectives for 'mother tongue' (Spanish) language.

The present SSL materials include a book of oral Spanish for first and second grade teachers, and two Spanish reading/grammar books for third and fourth grades. The series is periodically revised, based on field evaluation of the texts; more advanced books are being developed at the time of this writing. The oral Spanish textbook includes conversations to memorize, Spanish songs, and some 'total physical response'-type exercises (in which an oral stimulus, such as a command, prompts a physical response). The child is thus taught to

deal with common questions and situations involving a Spanish speaker in the child's community. The reading/grammar books teach dialogue, vocabulary and parts of speech. All of these books teach standard Spanish and use regional vocabulary, with an emphasis on correct pronunciation and Peruvian customs. The goal of the SSL curriculum is twofold: to teach the bilingual student how to interact with any Spanish speakers he normally meets, and to prepare him for transition to Peruvian public high schools in both oral and written skills.

3. Mathematics

The present series of math texts consists of one book for each of Grades One through Four. Each book fulfills the government curriculum objectives for the appropriate grade. Instructions to the teacher for each lesson are in simple Spanish, but the teacher is trained to use the mother tongue in teaching the lesson.

The principal advantages of the SIL-prepared math series are: 1) the very simple level of teaching instructions in Spanish, and 2) the quantity of examples and practice problems given with each lesson. Other math books available make no attempt to control the level of Spanish used, and also expect the teacher to invent his own practice problems; each of these characteristics assumes a level of sophistication which is not generally found among bilingual teachers in the jungle. The qualities that make a teacher most effective in native jungle communities--familiarity with the local culture, fluency in the language and sympathy with local concerns--work against him when he tries to use school materials that are rooted in Spanish culture and language.

4. Science

The natural and social science texts begin with the same readiness book early in First Grade. Then the two sciences diverge, using separate texts for Second through Fourth Grades. In Fifth and Sixth Grades a teacher's guide is used which contains material for both subjects.

The natural science series includes texts in both Spanish and the mother tongue. The texts with Spanish instructions are meant to be taught as the math series is, with classroom interaction entirely in the mother tongue. Texts available in the mother tongue are mainly

health books, covering such subjects as personal hygiene, tuberculosis, amoebiasis and parasites, and the human body.

The SIL-prepared texts for social science are in Spanish, and are limited to First and Second Grades. Use of Peruvian Spanish texts is encouraged for the higher grades, mainly because of the potentially controversial nature of the subject.

5. Curriculum guide

One recent addition to the SIL-prepared bilingual education materials is a curriculum guide which helps the bilingual teacher in several important ways. It contains a daily plan for each subject and grade up to Grade Four, indicating the textbook and page numbers to be taught each day. Lessons for all four grades are listed together for each subject and day, helping the teacher with more than one grade to plan his class time more easily.

An especially useful function of the guide is that it lists the government curriculum objectives for each subject, and notes which objectives are being accomplished each day. This helps the bilingual teacher in preparing monthly reports of objectives achieved for his supervisor. Previous to the publication of the curriculum guide, the teacher had to search through his lesson plans to find where and how he had fulfilled various objectives; now they are clearly presented for him--a major improvement for the less sophisticated teacher.

As teachers are trained to use the curriculum guide in the teacher training course, they practice writing daily plans for one grade, and also for multiple grades. As the teachers face the need to teach two to six different math (or reading, or science) lessons in one one-hour period, a further advantage of the SIL materials becomes evident: the lessons are constructed to allow the teacher to go back and forth between grades. New material is alternated with desk work, so that the teacher can actively teach one class and still keep the other grades busy.

6. A comparison

The SIL-prepared bilingual materials may be favorably compared with other materials used by Peruvian elementary school teachers, on the bases of cost and availability, level of Spanish used, cultural background of content, and teacher preference.

The textbooks most commonly used in the Peruvian public schools are actually teacher's guides; one book contains all the subjects and material to be taught in a grade. The content of these books is geared toward the cultural environment encountered in Peruvian cities rather than rural jungle areas. The texts are also expensive for the bilingual teacher, who must buy his own materials. Furthermore, they are hard to obtain in some rural areas. SIL-prepared texts cost relatively little, as they are almost ninety percent subsidized for sale to bilingual teachers. They are written by linguists and native speakers of the languages involved, approved by government educational authorities, and distributed through the linguists involved in the language groups or through warehouses scattered throughout the jungle. Distribution problems do exist, mainly among groups which have no linguist actively involved with them.

The level of Spanish which Peruvian public school materials require is a major source of difficulty for the bilingual teacher. It must be remembered that the teachers themselves are not usually proficient in Spanish, especially in written form. They generally have a primary or high school level education; they are using books in a second language, and are expected to translate each lesson into the mother tongue as they teach it. An emphasis on creative, innovative teaching is of little help to a teacher in such a position. For this reason, although the public school textbooks in Spanish may be adequate for native Spanish speakers, they are daunting to the typical bilingual teacher and his pupils in the jungle. The SIL-prepared materials emphasize clear teacher instructions, controlled Spanish vocabulary and lessons complete with examples and exercises where appropriate.

Bilingual teachers with the option usually prefer the materials designed for them, unless they object to using mother-tongue materials on principle. Spanish carries great prestige, and the bilingual teacher may want to use Spanish texts because it seems more 'educated' to do so. The desire to emulate the national system can be strong; even if he cannot use the books effectively, the bilingual teacher may choose them. However, the majority of bilingual teachers appreciate what the bilingual series has to offer; the texts are popular among bilingual teachers in the jungle.

BOOK REVIEWS

Guthrie, Grace Pung. 1985. **A school divided: an ethnography of bilingual education in a Chinese community.** Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc., publishers. 241 pages.

Reviewed by Ida Ottaviano

A School Divided was written by Dr. Guthrie to demonstrate how an ethnographic study could give an in-depth understanding of a bilingual education program by bringing out underlying problems of language and culture. She rightly maintains that the standard achievement test shows very little of what is being accomplished. The book is a revision of her PhD dissertation done in King School and the Chinese community of Little Canton in Cherrywood, California (vicinity of San Francisco). She did a long-term, multilevel study using observation interviews with informants in the school and community to discover how the bilingual education program was implemented and perceived by the community, and at the same time to study a sample of Chinese-American society.

The program was called a maintenance bilingual education program but it was not functioning as such for several reasons. The students were 1) English-speaking Chinese whose parents wanted a maintenance program for their children so they would learn to speak Chinese, and 2) new immigrants who were mostly interested in learning English so they could advance their economic situation. The conclusion was that all these children could not be taught in the same program for several reasons: 1) lack of time for teaching Chinese (only three hours a week were scheduled; 2) the great difficulty of learning the Chinese language; 3) the many dialects of Chinese spoken in the group; 4) the many different educational backgrounds of the students.

There are ten chapters in the book: Chapter 1 is an introduction and Chapter 2 explains the methods and procedures which Dr. Guthrie used. Chapters 3 to 9 discuss a study of the community and the school, including history and present setup of the bilingual program. Chapter 10 gives the conclusion: There had been certain benefits to the students in the program, but it was mainly ineffectual because of the conflict within it. The conflict was caused partly because the community as a whole had not been consulted in the inception of the program. As Fishman wrote in an article, 'The

Social Science Perspective', p. 77, in **Bilingual Education: Current Perspectives,** Vol. 1, 1977: "...Only real societal need and substantial societal support can make bilingual education succeed."

Dr. Guthrie's book gives a very strong point for the implementation of any bilingual education program: Every sector of the community involved must be brought into it. A cultural study is essential to give background insight to him who would be a change agent. Such study will probably mean the difference between the success or failure of the program. In her book Dr. Guthrie gives an excellent detailed account of how she did her study at the King School.

Book Review

Corbeil, Jean-Claude and Ariane Archambault. 1987. **The facts on file junior visual dictionary**. New York: Facts on File Publications. Price $18.95.

Reviewed by Olive Shell

The dictionary is the junior equivalent of the **Facts on File Visual Dictionary**. It is designed for children of ages eight to twelve. It contains 4,500 words in categories of animals, food, the human body, music, sports and eighteen other areas of interest to young people. The 650 illustrations are in full color; the details of the illustrations are clearly labeled.

The book presents an attractive tool for helping to expand the vocabulary and knowledge of the young people for whom it is intended.

The following statement is a declaration of the International Task Force on Literacy. This statement is reproduced here for your information and to acquaint you with the emphases of this influential group.

INTERNATIONAL LITERACY YEAR 1990

A CALL TO ACTION
from
THE INTERNATIONAL TASK FORCE ON LITERACY

PREAMBLE

We, the members of the International Task Force on Literacy, represent a wide range of non-governmental organizations with an outreach to over 60 million people in nearly every corner of the world. We call upon ourselves, other NGOs, governments and Heads of State urgently to make effective commitments for literacy and principles which have been identified during our fifth meeting held in Suraj Kund--India in October, 1989.

OVERVIEW

Mass illiteracy is inextricably linked with mass poverty, structural injustice and marginalization. Therefore, people need to be empowered as learners to get access to the education and knowledge which will enable them both to assume control over their own processes of growth, and to become active, responsible participants in a systematic process of social development.

Literacy therefore includes, but goes far beyond, the basic skills of reading and writing.

Women are the key figures in the global literacy campaign, as women and girls comprise about 70 percent of illiterate peoples. After excluding them from decision-making structures through centuries of subjugation and discrimination, today there is an urgent need to utilise their wealth of insights and talents in every sphere of social, political, and economic endeavour. To answer this need, a priority should be given to the education of girls and women in all literacy programmes. This positive discrimination will, no doubt, have an uplifting influence on the quality of education as a whole.

Conditions of mass poverty and illiteracy render people rather vulnerable to the forces of terrorism, ethnic violence and other forms of social disruption. Literacy efforts can offer benefit for all both in rural and urban settings. Therefore, education of school age children deprived of schooling and members of minority groups, often living in remote areas, should become one of the objectives of all literacy planning.

Parallel education systems both reflect and further institutionalise existing disparities. Where nonformal and [formal] education system[s] exist, linkages must offer entry points from one to the other. Each government must allocate the necessary resources to fit this restructuring of priorities. Improving existing programme efficiency and effectiveness will help release critical resources.

Literacy, as a vital component of any educational input, should not be projected as merely a means of seeking employment or facilitating consumerism. Education should be examined in the light of its contribution to the individual's holistic growth. It should be regarded as an efficient vehicle for bringing about fundamental social changes for the creation of a peaceful and just society.

Recognizing the harmful and intolerable consequences of the current situation, we declare ourselves ready to act on the vanguard of this campaign and urge the utmost support for the cause of universal education.

ORGANIZING PRINCIPLES

1.0 Definition of Literacy

Literacy is defined as the set of knowledge, qualities, skills, attitudes and capacities that enable individuals to preserve self esteem by assuming both control over their own growth, and by becoming active participants in a process of social change that will lead to a more peaceful, just and harmonious society.

2.0 Women and Literacy

Women should be the central focus of all literacy programmes. The root causes underlying the present dismal status of women's education are located in the structures of patriarchy which continue to influence attitudes and behaviour towards girls and women in many societies. This injustice based on gender is often compounded by

class and economic factors and has significant implications for the nature and thrust of education policy and planning.

2.1 Programme design must begin with an understanding of the specific cultural, social and economic problems faced by women.
2.2 Women's literacy programmes must necessarily include a component of sensitization and education of men in particular, and for other members of the family and society in general. Men should be prepared to accept the egalitarian situation which will come as a result of the education of women.
2.3 Every literacy effort should foster self-confidence in women.
2.4 Teacher training and material design and development, research and evaluation, learning strategies must all address the particular needs and learning difficulties faced by women and girls.
2.5 The entire range of methodology for women's literacy should be process oriented and should consciously promote dialogue between men and women and the full understanding of their equal partnership and shared responsibilities at home and in society.
2.6 Women should be taught how to co-operate to better promote the interests of women: educating their daughters, jointly abandoning practices which are to their detriment such as dowry systems and preference for the male child, training the next generation to think differently and learning many forms of economic, social and political co-operation. As the first educators of their children, mothers can substantially determine the values of each generation.

3.0 Learner Involvement as Empowerment

We begin with the assumption that all peoples can find both the direction and the capacity for development within themselves. All literacy actions must further empowerment and not increase dependency. This has many concrete implications:

3.1 Literacy instruction should foster participation in social, economic and political process as part of working together for social change.
3.2 Literacy programmes should be considered an initial stage in the development of long-term efforts to support learning and social development.
3.3 Literacy actions should promote people's awareness that education is their right and simultaneously their responsibility.
3.4 Literacy efforts should be designed to involve learners in deciding the focus, content, design and thrust of literacy acquisition.

3.5 Literacy should promote recognition of the values of one's own culture and respect for the culture of others.
3.6 Content and materials need to address local conditions and issues reflecting the diversity and range of basic learning needs.
3.7 Fostering self-realization of the individual and facilitating the individual's productive involvement in society must be the objectives of the literacy work. This alone can release the flow of hitherto hidden or suppressed energies, creativity and intellect which lead to happiness and human dignity.
3.8 A positive attitude towards learning needs to be encouraged as an essential part of the struggle for social and economic change. The power of critical and constructive thinking is an indispensable instrument for community action. The learner's own conceptions of the importance of their (sic) knowledge and actions is also significant. Literacy should not be only limited to increasing consumerism or facilitating employment.
3.9 Programmes must increase people's awareness of the magnitude of the global challenges to their survival. War, the debt crisis, terrorism, growing fundamentalism, communal violence, environmental degradation, drug and prostitution rings all pose radical threats.

Therefore, literacy should promote peace and non-confrontational problem-solving and should strengthen people's understanding of the benefits of representative government and their ability to promote and safeguard their interests.
3.10 The content must facilitate the elimination of all forms of prejudice: religious, racial, national, gender, caste, and social.
3.11 The content must promote the concept and value of peace and unity while encouraging the use of consultation as a means to resolve issues both in the family and in society as a whole.

4.0 **Resource Mobilization**

All possible resources must be harnessed and mobilized--conventional and non-conventional. Voluntary community efforts for literacy can provide new models for utilizing available resources. Lobbying and pressuring for diversion of scarce resources, from armament and military expenditure into educational, social and welfare sectors is another.

5.0 **NGO Involvement**

Voluntary, non-profit groups should mobilize all their forces to become more than ever effective means in motivating people at the grassroots to offer and seek education. They should provide for different types of formal and nonformal education of deprived groups of children, youth and adults. Establishing support activities for mothers, such as child care during working and literacy class hours, should become another type of activity offered by these groups. The degree to which their initiative and ability is respected by state and political authorities will determine their effectiveness as important partners in literacy action.

6.0 **Public Awareness**

Through information and mobilization activities the public should become keenly aware of the many dimensions and purposes of literacy. Furthermore, the general public should be involved in--especially at the local level--a public debate designed to mobilize general support for all kinds of literacy initiatives.

7.0 **Research and Evaluation**

There is very little systematic data or detailed analysis of what is happening on the ground in the literacy field; the ways and conditions in which people learn, the true nature of the nexus between gender, class, poverty and literacy. Greater financial resources should be placed at the disposal of research institutions in the developing countries. Clearly, there is an urgent need for new forms of research and imaginative ways of evaluation which will involve a far greater degree of people's involvement in both processes.

CONCLUSION

As we move into the International Literacy Year and open a Decade of Action, it is time to renew our energies, creativity and sense of determination as we join forces to make education for all a reality. We urge all committed forces to add their voice and strength to this collective resolve, believing that only through such global effort can we establish a just, equal and educated world.

TRAINING FOR LITERACY SPECIALISTS

Training for literacy specialists in Dallas includes two core courses and four electives:

PRINCIPLES OF LITERACY: ISSUES AND PROBLEMS IN WORLD LITERACY includes consideration of motivational factors, stimulation of indigenous authorship, orthography design, elements of reading methodology and alternative strategies for literacy programs. Two choices are offered: 001 for translators and 002 for literacy specialists. The latter course is being offered in Fall semesters only.

READING THEORY AND APPLIED LINGUISTICS (OR LITERACY MATERIALS) presents a survey of reading theory, with practical application to the preparation of literacy materials for preliterate societies. Attention is given to specific linguistic and psycholinguistic factors involved. This course is offered in the Fall and Spring semesters.

COMPUTATIONAL TOOLS AND METHODS IN LITERACY MATERIALS DEVELOPMENT presents: a) an intensive introduction to text manipulation tools; b) the use of specialized software, for generating alternative proposals for primer sequencing; c) an introduction to **PUBLISH IT**; d) an introduction to technical literature regarding topics in symbol frequency, sequencing, word length, hyphenization, etc., in early reading material; e) an introduction to basic principles in graphics art design. The course is offered each alternate year; it was offered in the Spring of 1990 and will be offered again in the Spring of 1992.

LITERACY INSTRUCTION AND APPLIED LINGUISTICS (or TEACHER TRAINING IN NEOLITERATE CONTEXTS) offers a study of the linguistic, pedagogical and sociocultural bases for training literacy teachers in languages of preliterate societies. It considers surveys, current trends in literary instruction, issues of language choice, and the use of linguistically appropriate material. It is offered in the Spring semester only.

WRITING SYSTEMS AND ORTHOGRAPHY DESIGN offers: 1) an examination of a representative sample of existing writing systems including scripts from Asia; 2) an examination of the major issues in cognition and perception with respect to deciphering a script system for the purposes of reading; 3) focus on the linguistic, sociolinguistic, political, and economic factors bearing on orthography design. The course is offered each alternate year. It will be offered in the Spring of 1991.

ISSUES IN BILINGUAL EDUCATION is a reading course focusing on the major theoretical and practical issues in bilingual education. The course includes a survey of the major literature on bilingual education as well as a comparative examination of a broad spectrum of recent bilingual education programs around the world. The course is offered occasionally, and will be given in the Spring of 1991.

THE TOGO BRAILLE PROJECT

Lois Wilson,

Togo-Benin Branch, West Africa.

After obtaining a BA degree in Christian Education, Lois did church youth work. She became a member of WBT/SIL in 1984. She was assigned to the Braille project in Togo in 1985, as a literacy specialist.

I. Introduction
II. Producing Braille
III. Literacy Methods
IV. Rehabilitation
V. Teacher Training
VI. Personal Thoughts about the Project

I. Introduction

1. The need for braille work

According to the 1988 Ethnologue[1], there are up to 40 million blind people in the world. One percent of Africa's population is blind, due to trachoma, malnutrition, cataracts, glaucoma, onchocerciasis (river blindness), and accidents.

Literacy is a possibility for these people through the use of braille, a system of raised dots on paper which can be deciphered with the fingertips. Braille alphabets and reading materials are available in most major languages, but little work has been done in braille in the languages spoken by less than 100,000 speakers.

The S.I.L. has concentrated initial efforts to correct this situation among blind adults of West Africa, beginning in Togo.

2. Goals of the project

The goals of the Togo Braille Project are to create braille alphabets for languages which need them, teach braille literacy to blind speakers of these languages, and produce reading materials (including translations of the Bible). Social rehabilitation is another major facet of the work.

3. Project history

The project was initiated in Togo in 1983 by Paul Meier of the Summer Institute of Linguistics (SIL) and Samuel Nabine, a Togolese literacy worker and Bible translator. Richard and Carolyn Steele came to Togo to direct the project in 1985. I joined the team in 1987 as a literacy specialist. Scott and Polly Rempel arrived in early 1989 to handle the administration and accounting.

To date, two braille literacy programs have begun in Togo. The first is in the central region among the Bassar people and the second is in the capital city of Lomé in the south among the Ewé people. The Bassar program is centralized in a new facility in the town of Bassar. The staff also travels to neighboring villages to give rehabilitation training to others not enrolled in the full-time program. The 18-24 month program (length of time dependent on individual student abilities) given at the Bassar center to full-time students includes instruction in braille literacy, hygiene, orientation and mobility, agriculture and music. The Ewé program is decentralized. The students live with their families and an itinerant teacher travels from home to home on a motor scooter. The program includes training in braille literacy and in orientation and mobility.

Since 1985, we have produced braille materials in six languages. In the Bassar language we have portions of the New Testament, a primer and a book called **Great Questions of Life**. In Ewé, we have a primer and a book called **Jesus, Who is He?** (a text by the United Bible Societies). We hope to print soon the New Testament and an Easy Reader series, also a United Bible Societies text, in Ewé. We have produced Scripture portions in the Hausa language and the New Testament in the Izi language, both in Nigeria, as well as the Zarma language in Niger and the Zapotec language in Mexico. Other immediate projects are Kabiyè (spoken in Togo), and Konkomba (spoken in Togo and Ghana).

4. Funding

Funding comes from several different organizations, including those interested in providing Scripture, those interested in any work with minority language groups and those who focus on development work with the handicapped. The United Bible Societies have underwritten some of our Scripture production costs. We receive donations from SIL supporters in the States and in Europe. The German-based Christoffel Blindenmission, which has a regional office

in Togo, has provided funding and technical advice in both agriculture and braille education. World Vision International provided funds for the construction of the Bassar center and also contributes toward the operating budget of the Bassar program.

5. Cooperation with local entities

Churches in Bassar have shown interest in the school for the blind and are represented on its advisory committee. The local Assemblies of God church has now taken over the administration of the Bassar school and the task of reporting to World Vision. Oversight of the Ewé program and of future programs has been assumed by the Council of Christian Churches.

Local authorities have been very supportive of the program. Two national ministries were present at the dedication of the new facility in Bassar and expressed very positive interest in the program.

Two mission schools for the blind in the south of Togo have been helpful to the Ewé program in providing pedagogical training for the itinerant instructor. One of these schools will be using our materials to incorporate Ewé reading lessons into their curriculum, which is currently in French.

II. Producing Braille

I. The development of braille alphabets

Braille is written with six raised dots in a braille 'cell'. The dots are arranged into patterns (sixty-three combinations are possible) to represent letters of the alphabet or abbreviated forms of words. There is an international standard braille code for most letters which we use when we design an alphabet for a new language. New codes are assigned to special characters which are not included in the international braille alphabet. The orthography we use is the same one which has already been developed by the linguistic team working in each language.

In designing braille alphabets, we strive to keep them as simple as possible in order to make learning easier. For example, rather than creating one-cell dot combinations for functors or abbreviations, as is found in more extended braille systems, we spell out all words letter-by-letter. This reduces the number of combinations for the student to learn, though in the long run it uses more paper and may decrease reading speed.

The same principle is applied in the use of diacritics. We place a code for the diacritic before the code for the letter, rather than designing a new code for each possible combination of diacritics and letters, as is done in the French alphabet. For example, a high tone 'á' will be represented by the code for high tone followed by the code for 'a'.

2. Equipment and materials

We produce all of our own materials in the SIL office in Lomé. This is made possible by a German-made Theil Braille Printer which allows us to print materials directly from a computer. When we receive a text on computer disk, we run it through a 'changes table' which converts the letters to braille codes and reformats the text. The printer then produces the text for us at a rate of eight seconds per page on 11 x 11 1/2 inch braille paper. Duplicates are then made by melting durable plastic sheets of the same size over each master sheet on a 'thermoform' machine.

III. Literacy Methods

Note: Much of what we do in teaching braille literacy is parallel to teaching sighted literacy. Differences are mentioned below.

1. Prereading

To read braille, a student needs first to learn to pick up as much information as possible from all of his fingers on both hands. This is called developing tactile sensitivity. Since an average sentence can take up to four braille lines, speed is critical to retention, so the student needs to develop the ability to read quickly. We have developed a sensitivity booklet which has exercises in tactile sensitivity and two-hand coordination, both of which are critical for good reading comprehension.

Individual letters are taught first on a pegboard, an oversized braille cell with removable pegs which represent dots. The student then learns to recognize the shape of each letter in print by rapidly tracing an entire line of the same letter on a page. It is better to learn to recognize the shape of a letter rather than to concentrate on the individual dots of which it is composed. Focusing on the individual dots slows down the rate at which one reads.

2. Reading

For those who learned to read French before losing their vision, we offer lessons in French braille as a transition into braille in the mother tongue. Those who have never been to school start by learning to read their own language.

Each braille primer is fundamentally based on the primer developed by the linguistic team working in the language. The format is modified for braille. It is less confusing for a blind reader to follow words printed horizontally on the same line, so the vertical boxes used in some primer methods are reformatted. Where new letters, syllables or words are printed once (or at most a few times) on an ordinary primer page, we print them several times on one line so that the student can become accustomed to feeling them beneath his fingers. We start with short, double-spaced lines and gradually change to longer, single-spaced lines. New techniques for constructing braille primers are currently being researched.

If the student has difficulty associating a keyword with real life, the teacher sometimes must exhibit creativity to find tactile aids for the student to touch.

3. Writing

Students learn to write with a braille slate and stylus. A sheet of paper is placed on a metal tablet and held in place by a frame containing a grid of outlined cells. The student writes backwards from right to left by punching the paper into the holes with a pointed stylus which creates raised dots on the paper when it is turned over. Lines are then read from left to right.

Most students learn quickly to use the slate and stylus. Perkins writers offer an easier method of manually reproducing braille but the machines are too expensive to provide for each student. The Bassar school has a few Perkins writers in the classroom.

IV. Rehabilitation

Some blind people are adept at moving about freely, relating to other people, even earning an income. Others appreciate assistance in these areas. Since we are working with them already with literacy, we take the opportunity to add some rudimentary training in rehabilitation skills.

I have put together a booklet teaching some of the basic principles of mobility and orientation. It includes exercises in using the senses, walking with a cane, and finding lost articles, as well as suggestions for working with the family of the blind person. This booklet is designed to offer minimal assistance when professional help cannot be obtained.

For training in agriculture, the teacher needs tools, cord (the cord is used to lay out the garden so the blind person can orient himself when planting), knowledge of gardening under local conditions, and a lôt of creativity in adapting to individual situations.

V. Teacher Training

We have done most of our teacher training ourselves. We have also sent the staff to training seminars and called in specialists to give on-the-job training. The Christoffel Blindenmission has been very helpful in providing teacher training, as have the two blind schools located in southern Togo.

We are just now in the process of developing training manuals for distribution to those who are interested in starting a braille program in the language group in which they are working. I have written a manual for teaching sensitivity and the previously mentioned manual for teaching mobility and orientation. Richard Steele has developed a series of lessons for teaching the braille code to teachers. We are working on making these available in French and English.

VI. Personal Thoughts about the Project

The progress we have seen over the last six years has been steady but slow. Meeting the needs of the visually disabled takes more time than for the sighted for several reasons. The blind usually have had little stimulation since childhood, so learning often has to start at a basic level. Some students have multiple disabilities. Teaching time must include both reading and rehabilitation. More time is necessary in prereading instruction in order to develop tactile sensitivity. Still, every step of progress with each student makes it infinitely worth all the effort.

In meeting our goals of literacy and rehabilitation, we are constantly reviewing our strategies. For instance, we have found that while the school in Bassar is effective, the itinerant teaching program in Lomé is at least as effective and incurs fewer costs. The one-on-one

contact between the teacher and each student has also been a positive factor. This is the model which we plan to follow for work in other languages.

Some people have expressed various concerns about the Togo Braille Project. To those who question the validity of putting in so much effort for such a small percentage of the society, I would respond that the blind deserve the same possibilities as the sighted.

Others ask why we expend our time and our production facilities on minority languages. The Summer Institute of Linguistics, of which we are a part, works in many languages spoken by smaller groups of people. We are building on that base. The Braille Project is merely extending this service to blind members of these communities, helping these people to become literate, as well as addressing their needs in other areas of life.

[1]Grimes, Barbara, ed. 1988. **Ethnologue: Languages of the World**, eleventh edition. Dallas, Texas: Summer Institute of linguistics.

LET SPIDER TEACH IT

Ursula Wiesemann

Ursula worked among the Kaingang Indians in Brazil 1958-1978, and headed the teacher training school for them in 1970-71. She obtained a PhD degree in Germany in 1966. Since 1978 she has been a linguistics consultant for the Africa Area and is involved in training indigenous linguists.

"Spider sharpened his knife. He was going to prepare chicken." This is the text of the first lesson in a primer for the Aja people of Togo. Yes, you read right: the **first** lesson. It contained the letters *a*, *b* and the sight words 'spider' and 'chicken'. 'Sharpen', 'knife', 'prepare', 'he-future' were all constructed with the two letters plus tones which are drilled in the preparatory part of the primer.

How does one continue such a story within the constraints of a primer? This is what the authors came up with: Lesson Two, "Chicken was going to marry spider."—The plot thickens. At this point it needs some explanation by the teacher: obviously chicken was unaware of spider's plans! Subsequently a human agent comes in and pockets spider, chicken escapes, and the first five lessons, with Number Six as review lesson, complete this tale.

The whole primer was made this way: each group of six lessons represents one animal story, each one with its own plot! "Excellent stories" was the comment when we reviewed them word by word a month later. The review was 'much harder than writing the stories,' said the three reviewers who had also been involved as authors. But they chuckled every time they relaxed enough to think about them.

We had begun making the primer the 'classical' way: a story about ordinary people. But the stories we got had no sequence to them. The young man in Lesson Twenty-two became a baby on his mother's back in Lesson Twenty-three, and his mother had the same name as his playmate! So we turned to the animals as a solution.

It turned out to be a creative one. Africans are used to imagining animal stories; they are the nightly diversion in the village. It was still hard work to imagine good ones with only a few words, but, as the vocabulary got larger there were discussions among the animals about the value of sending your children to school, etc. "Spiders can do anything," I was told. I expect they could discuss in very practical terms most any 'functional' subject, making teaching fun!

LETTER TO THE EDITOR
re learning and teaching styles, NOL 62
Ralph Ireland

Ralph Ireland, formerly an electrical engineer, now a member of WBT/SIL, is currently involved in personnel development. One of the instruments he uses is The Learning Styles Inventory of David Kolb. This latter explains his interest in learning styles.

The articles (in NOL 62) contain a lot of practical, hard-won wisdom. I would like to make one plea: in our (necessary) efforts to mould teaching styles to learning styles, let us not overdo it. Let me explain what I mean.

Take, for example, the statement in Pam Gentry's article (p. 10): "The teaching styles of the institution, the teacher and the pedagogical method must correlate with the style of the learner for optimum ease of learning and long-term retention." Pam is, of course, quoting other authors here and the statement has a lot to be said for it. However, note the caution expressed by Alice Larsen (p. 54): "There are probably both linear and global peoples in any culture. We might suppose that since there is a normal distribution of intelligence, so there is a normal distribution of learning styles. However, we have to take cultural values into account also, and it is likely that these values will skew the distribution to one side or the other."

The point I'm making is that no matter how carefully we 'measure' our learning style and the learning styles of our pupils, there will be mismatches of various kinds--and many people will have 'mixed' styles. On top of this, every culture is likely to 'offer' a variety of different learning experiences, notwithstanding different distributions within each culture.

Bernice McCarthy, the originator of the '4MAT System' argues cogently for teaching that takes *all* students through all modes of learning within the 'learning cycle'. In 'The 4MAT System -- Teaching to Learning Styles with Right/Left Mode Techniques', p. 86, she says:

> "I am often asked to assist teachers in 'matching' teaching styles with student learning styles. I am always hesitant. First, I do not believe one learning style, however carefully refined, is sufficient without understanding its weaknesses as well as its strengths. My firm conviction ... is that students need to progress through the entire

learning cycle in order to develop the skills that do not come naturally, while refining their own innate skills."

She then quotes Betty Edwards[1] as saying, "I really feel that to teach to a person's dominant mode may not in fact turn out to be exactly the best thing to do. ... non-use of the opposite mode may in the long run be more destructive. ... We need to pay more attention to developing strategies that will encompass that great complexity of individual differences. I think that is the better way to go rather than trying to define all the differences."

It is true, of course, that McCarthy and Edwards are speaking about educating within a western culture, but I believe we should pay attention to the concerns outlined. The 'global village' in which we all now live will quickly bring experiences and situations to the most isolated culture, which will call upon all the learning strategies that the human brain is capable of. If it is true--*as a gross generalization*--that the 'western' world is essentially 'linear' and thereby missing out on the insights that 'global' learning can bring, let us not be guilty of locking up the 'nonwestern' world into a 'global' mould, thereby effectively denying it of 'linear' insights.

Is there someone 'out there' who can contextualize Bernice McCarthy's approach and apply it in some field situation?

As a (modest) start, I would suggest that the promising approach developed by Kindell and Hollman at the British SIL in separating 'global' and 'linear' students into two streams, be broadened by a 'McCarthy-like' approach. Data I have--based on the measured learning styles of SIL students at one such course--suggests that a number of students who had 'mixed' styles would have done better in a 'McCarthy-like' class, had one existed. I would also suggest that *all* the students would benefit from such a class--for the reasons McCarthy gives (see above). A typical British SIL has students from many different cultures--including 'nonwestern'; it might therefore be a promising 'laboratory' for such an approach.

Reference

McCarthy, Bernice, ed. 1987. **The 4MAT system: teaching to learning styles with right/left mode techniques.** Barrington, Illinois: Excel Inc. (200 West Station St., Barrington, IL 60010. Library of Congress No. 80-70421).

[1] Remarks made at McCarthy conference Dec. 1979

LEARNING STYLES AND TRAINING PRINCIPLES

Robin Rempel

SIL, Papua New Guinea

Robin Rempel has been working in Papua New Guinea since 1986. She is an itinerant trainer for translation and literacy workshops. Presently she is working primarily in the Sepik Province as a literacy consultant and trainer.

I. Introduction
II. Global-Linear Model
III. The Problem
IV. Suggested Training Principles
V. Multistrategy Method
VI. Bibliography

I. Introduction

There are a lot of valid thoughts and talk these days about appropriate training methods. This is a need expatriate trainers have not always been aware of. However, there seems to be a major move towards trying to adapt teaching styles to fit the learning styles of students and trainees. This is an extremely basic and important principle! As expatriate guests in other's countries, we are present to serve and help our hosts. However, it is my strong conviction that as guests, we should strive very hard to adapt to our hosts' way of doing things (language, culture, methods), rather than requiring them to adjust to our ways. Specifically, our teaching/training techniques should be congruent with the cultural style of learning with which they are comfortable and accustomed to following. With that as a premise, I trust this article will give further insights into the differences in learning styles, as well as provide some ideas on how to make training methods more culturally appropriate and accommodating to our hosts.

II. Global - Linear Model

Following is a binary model on learning styles which has been simplified from a presentation by Gloria Kindell given at an S.I.L. inservice in Dallas, Texas, Spring of 1989.

GLOBAL (HOLISTIC)	LINEAR (ANALYTICAL)
Learning Style	
simultaneous perception & processing	sequential perception & processing
intuitive	cognitive
holistic/synthetic	analytical
big picture → details	details → big picture (figure it out myself)
visual (write,watch...)	verbal (read,listen...)
demonstrate and do	explain/lecture and do
active participation 'show me how'	passive participation 'just tell me how'
info needs personalizing	theory is OK
real examples (reality)	hypothetical examples OK
group oriented/dependent 'let's do it together'	individualistic/indepen. 'I'll do it myself, thanks'
intuitive/feelings	facts/objective
reflective	abstract
free/spirit	boundaries/law
more creative	more precise
attentive to generalities	attentive to details
Learning Atmosphere	
homey/warm/relaxed	functional/serious
informal	formal
desks in circle	desks in a row
people oriented	work oriented
fun! enjoyment!	production!
popcorn and koolaid	pencils and books
time nonexistent	time pressured
Teacher	
part of the gang	authority figure
guide/model/facilitator	leader
Lessons	
contextualization needed	intro brief and factual

purpose/'why'	focus on lesson content
analogies/comparisons appreciated (it's like)	describe logically
event/project oriented	efficiency/hour oriented
need to finish/closure!	time conscious
needs assimilation time	ready to apply now
less competitive	more competitive
team work: help and be helped	independent
appreciates teacher guidance	irritated with too much help
skills	theoretical principles
discussion/dialogue	lecture/rote
dramatization	very economic in:
symbolism/parables	time
object lessons	teachers
illustrations	information
singing	money
humor, fun	

As you have probably realized, most people are neither totally global nor extremely linear. The majority of people are a combination from both sides, or somewhere on a global-linear continuum. Every combination has strengths and weaknesses. Furthermore, it is not a matter of one certain learning style being right or good, while another is wrong or bad. Learning styles simply *are*. The important thing is that the teacher or trainer makes his teaching style fit the learning style of the students or trainees. That is, if maximum learning, coupled with maximum motivation, is the goal.

III. The Problem

Based on observation, studies (see papers by D'Jernes, Sanders, Schooling), and personal evaluations by PNG nationals themselves, it is quite obvious that the majority of Melanesians tend very much toward having global learning styles. Traditionally, their learning has occurred via wholistic, hands-on, observe and do, informal, event oriented, group dependent methods. They prefer and are comfortable with a more global teaching style.

Herein lies the problem. Most school education is done in a very Western/linear way. Those who have made it through this formal, more theoretically based system, have either been comfortable with a linear teaching style, or they have been able to adapt sufficiently enough to learn by it. Consequently, since a linear or analytical style

of teaching is what was used to teach us (by and large), when we teach, we automatically revert to the model we learned under. Unfortunately though, not everyone is capable of adjusting to the degree it takes to learn from a teaching method based primarily on the lecture and reading modes of imparting information and skills. And many global learners who try, end up only frustrated and defeated in the attempt. Unintentionally, otherwise very intelligent and creative trainees have often become demotivated simply because a teaching style congruous with their cultural upbringing and experience has not been used.

IV. Suggested Training Principles

Although it has been said before in different ways, the following are a few suggested training methods which could be employed in writers' workshops, teacher training courses, or any type of training course:

1. Let lectures and note taking (passive learning) take a very minimal amount of time. Color-coded charts and notes can be prepared and given as handouts at appropriate times. If it is absolutely necessary to use monologue/lecture as a teaching device, strive to make it as colorful and hearable as possible with many illustrations, examples, comparisons, word pictures, and/or questions to keep the audience actively thinking and involved. [*Rule of thumb*: have at least one comparison, analogy, skit, or example to illustrate every point made in a presentation.]

2. Demonstrations, observation, drama, skits, imitations, singing, media audiovisuals, discussion, games, question-answer, dialogue, hands-on practice and other like means of active participation, should be used as the major medium of communicating new knowledge and concepts (rather than monologue lectures).

3. **Start** the training with a look (via demonstration, a media presentation, visiting an actual school, or handling a book, etc.) at what is the desired *finished* product. In other words, give the big picture or the big idea in physical form. Trying to explain with words is inadequate here for global learners.

4. Proceed in training by breaking the big picture down into workable chunks, but always present each chunk in the context of the whole. (Keep the big picture in mind.)

5. When the smaller chunks have been learned, gradually practise piecing them back together to formulate the whole again.

6. In teacher training courses, it is best to work with actual materials and children or adult students. Real materials and situations are much better than hypothetical situations whenever possible.

7. Provide adequate time for questions and clearing up fuzzy thinking. This is an aspect that is often rushed by expatriate trainers. If no questions come up from the trainees after a presentation, maybe they are so confused they aren't sure what questions to ask.

8. There should be a form of closure for the larger chunks (i.e., feast, graduation, etc.) as well as the smaller units of content or skill (i.e., progress charts which can be checked off), and periodic time for organizing and revising is helpful to trainees.

9. Strive to keep a relaxed, open and light (humorous) atmosphere throughout the training process. It is a known fact that laughter enhances learning capabilities. Let the endorphins flow...!

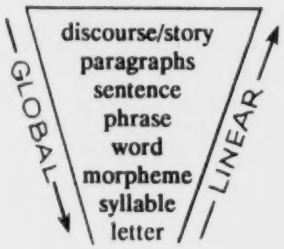
Also, keep in mind that shorter (two to three weeks) training courses which occur more often will have better long term results than longer, information packed workshops. Let's not be guilty of giving information overload resulting in burnt-out trainees (not to mention trainers!). *Revision* and *follow-up* are key elements in successful training. I firmly believe that the extra time, energy and creativity required to train globally will come back to us in multiple dimensions if we will commit ourselves to quality training appropriate to the trainees' preferred learning styles. As Arden Sanders indicates in his dissertation, it takes *a lot more work* to prepare a global teaching presentation than it does to prepare a lecture. Remember that. Prepare for it.

V. Multistrategy Method (MSM) on Target

Based on the global - linear model, it is easy to see why the MSM and other similar methods of teaching literacy are so successful: they accommodate both global and linear learners.

The MSM teaches literacy via two main approaches: (1) Story track, and (2) Workbook or primer track. The Story track accommodates wholistic learners—working from the top of the hierarchy down to words, while the workbook or primer approach can

accommodate linear learners—working from letters up the hierarchy toward the story level.



Literacy methods incorporating both global and linear approaches not only allow for learning to take place within one's own preferred learning style, but they also encourage development in other aspects of learning.

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A PERCEPTUAL LEARNING DIFFERENCE

Marj Warkentin and Ron Morren

Marj., a certified elementary school teacher, taught and tutored in the U.S., Bolivia and Surinam. She assisted in the development of the Aymara literacy program and the first bilingual training course in Bolivia. She has assisted in personnel areas for the U.S. Home Division and International Personnel. Marj. assisted Helen Irlen in research and the development of Scotopic Sensitivity Syndrome and trained in the use of Irlen filters.

Ron Morren, a teacher by profession, taught at elementary, secondary and tertiary levels; his first assignment with WBT/SIL was as a Junior High School teacher for MKs in the Philippines. Since then he has worked as a literacy specialist, bilingual education curriculum development advisor, and teacher/trainer of nationals both in the Philippines and in Latin America. Hearing of the Scotopic Sensitivity Syndrome from Marj Warkentin eventually led to Ron's involvement as a screener for SSS. He is currently assistant director for the Americas Area, and continues to have screening appointments for SSS as time allows.

I. Introduction
II. What is Scotopic Sensitivity Syndrome?
III. How is Scotopic Sensitivity Syndrome treated?
IV. Symptoms of Scotopic Sensitivity Syndrome
V. Spotting Scotopic Sensitivity Syndrome

I. Introduction

Most of us are probably acquainted with students who, although they appear bright or above average in intelligence, are not producing at a level considered appropriate to their abilities. They may be classified as underachievers with behavior/attitude/motivation problems, or considered just plain 'lazy'. Such students are often diagnosed as having reading problems, dyslexia, learning disability, attention deficit disorder, or some other developmental delays. They *may*, however, actually be suffering from Scotopic Sensitivity Syndrome.

II. What is Scotopic Sensitivity Syndrome?

Scotopic Sensitivity Syndrome (SSS) is a perceptual dysfunction affecting principally reading- and writing-based activities. This syndrome is related to difficulties with light source, glare, luminance,

wavelength, and black and white contrast. Individuals with SSS must put more energy and effort into the reading process than an ordinary student. Constant adaptation to distortions of print or white background causes fatigue and discomfort, and limits the length of time they can read and maintain comprehension. This may result in slow reading rate, inefficient reading, poor comprehension, strain and fatigue, and inability to read continuously. Scotopic Sensitivity can affect attention span, energy level, motivation, work production, handwriting, spelling, and depth perception.

Scotopic sensitivity is not, of itself, a learning difficulty in the accepted sense. Rather it is a complex and variable condition often found to coexist with other learning difficulties. Specific symptoms of SSS usually remain undetected by standard visual and medical examinations, educational and psychological evaluations, and other school related tests.

Since SSS is a perceptual dysfunction rather than a dysfunction of the physical process of sight, it is important that an individual complete any necessary vision testing and treatment with an appropriate specialist before SSS testing or treatment begins.

While research continues, best neurological opinion is that by selectively reducing the input of specific wavelengths of light, the Irlen filter technique allows receptor cells in the retina or others in the cerebral cortex more effectively to analyze visual information. For those demonstrating SSS, the neural pathways seem to have difficulty processing full spectral light causing perceptual distortions.

III. How is Scotopic Sensitivity Syndrome Treated?

The Irlen Institute of Long Beach, California, has developed a technique to treat SSS with the use of colored filters called Irlen filters. This treatment consists of altering the amount of the problem shade of color before it enters the eyes of the individual. Irlen filters are spectrally modified filters that can improve reading rate, accuracy, comprehension, sustained attention, and reduction in strain and fatigue for those with SSS. The correct colored filters are either worn like glasses or a tinted, plastic overlay is placed over the printed page. Additional personal benefits include an increase in sustained attention, improved self-esteem, and improved academic and work performance.

It is only through an intensive diagnostic process that the correct color can be determined to meet each individual's specific needs and provide maximum benefit. It is also a process of discovery for the individual to realize why reading is difficult, how he/she may perceive things differently from someone else. A person with SSS has never had any way to compare how he/she perceives things so has usually not thought about what was actually happening.

Successful treatment of SSS is not a cure-all, and a complete program may need to include other evaluations. Remediation is often needed to correct other reading problems and learning difficulties and/or to correct a lifetime of compensatory habits. Irlen filters, however, have often been found to be the turning point in making remediation successful.

IV. Symptoms of Scotopic Sensitivity Syndrome

Symptoms of SSS consist of the following major categories:

1. **Photophobia** – sensitivity to glare, brightness, intensity of various lighting conditions, especially fluorescent lighting; reactions may include abnormal difficulty and discomfort reading and working under fluorescent light, bright sunlight, and driving at night.

2. **Background accommodation** – ability to accommodate black/white contrast in printed material, including textbooks, math pages, and sheet music; the background may appear to glare or dominate, making characters less legible.

3. **Visual resolution** – ability to see the print clearly and free from distortion, such as print that shifts, moves, or disappears.

4. **Scope of focus** – ability to perceive groups of letters or words at the same time; a very small area of the page is clear with the surrounding material appearing blurred or disappears.

5. **Sustained focus** – ability to maintain focus except with the use of inordinate energy and effort; may include blinking, squinting, or taking breaks as strategies to reestablish focus.

6. **Depth perception/Gross motor** – ability to judge distance accurately, including such effects as difficulty walking up and down

stairs, tailgating while driving, poor ball sport performance, and difficulty in judging differences in height and depth.

V. Spotting Scotopic Sensitivity Syndrome

Some possibilities to watch for:

General reading characteristics:

- Reads in dim lighting.
- Skips words or lines.
- Reading is slow and hesitant.
- Reading deteriorates.
- Poor reading comprehension.
- Slow reading rate.
- Inability to read continuously.
- Misreads words.
- Trouble tracking.
- Avoids reading.

Complaints while reading:

- Strain or fatigue.
- Headaches or nausea.
- Falling asleep.
- Eye pain.
- Print indistinct.
- Background uncomfortably bright.

General writing characteristics:

- Writes up or down hill.
- Unequal spacing.
- Makes errors when copying.

General mathematics characteristics:

- Sloppy, careless errors.
- Misaligns numbers in columns.

Musical problems:

- Difficulty reading music.
- Plays better by ear.

Depth perception:

- Clumsy and uncoordinated.
- Difficulty catching balls.
- Difficulty judging distances.
- Extremely cautious while driving.

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Notes for contributors: Readers are invited to submit letters of comment and/or publishable materials to the editor of NOL at **The International Linguistics Center, 7500 W. Camp Wisdom Road, Dallas, TX 75236.**

Computer media: Contributors who have copies of their manuscripts on magnetic media such as 5.25" diskettes in PC/MS-DOS format are urged to submit the same along with their manuscript.

Notes On Literacy

No. 65, 1991

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SUMMER INSTITUTE OF LINGUISTICS
7500 W. CAMP WISDOM RD.
DALLAS TEXAS

NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

International Academic Bookstore

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
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ORTHOGRAPHIES, LANGUAGE PLANNING AND POLITICS: REFLECTIONS OF AN SIL LITERACY MUSE

Marilyn Henne[1]

Marilyn's formal training is in English literature, linguistics, Biblical languages and most recently, sociolinguistics. She and her husband, David, served for twenty years in a translation and literacy program among the Quiché (Mayan) natives in Guatemala. Marilyn is currently Associate Director for Academic Programs in the Central America Branch (CAB).

I. Introduction
II. Various Perspectives on Alphabets
III. Language Planning and the Alphabet Dilemma
IV. The Underlying Issue: Politics
V. The Challenge: Balance and Service
VI. Bibliography

I. Introduction

"The soldiers of literacy, as the writer Kazantzakis called the letters of the alphabet, are the most conspicuous part of the written languages in which they are employed. They may also be the most misunderstood." Frank Smith, literacy theoretician and teacher, thus began his chapter, 'What's the use of the alphabet?', in his 1988 essays on education, **Joining the Literacy Club** (1988:32).

These words ring a familiar bell for the field linguist. Struggling through the intricacies of phonological analysis and consequent design of a practical orthography, the OWL (ordinary working linguist) pours his lifeblood into understanding the sound system of a little-known minority language. Then, after all is said and done, the 'soldiers of literacy' seem to be shooting in the wrong direction. They are indeed conspicuous and often most misunderstood. Why should the innocent black marks on a page be so misunderstood? Aren't these 'soldiers of literacy' invading the territory of nonliterate or preliterate societies to establish the sovereignty of the written word? Isn't such a sovereign rule greatly to be desired?

II. Various Perspectives on Alphabets

The linguist typically thinks of an alphabet as the scientific result of phonological analysis and as a practical tool for encoding a message. The message is intended to be decoded and understood. It is to be retained through interactive use (Brice-Heath 1987) and shared with others. Therefore, for the applied linguist, alphabets have, above all else, an instrumental or functional purpose (Kelman 1971).

Societies with a long or strong literary tradition use alphabets to reproduce words, which when strung together somewhat after the fashion of oral speech, produce books and other written materials. All kinds of information can be processed and shared. People are expected to follow directions from the printed page, interact with the text, come to conclusions, and change their behavior. We also expect the pages crowded with wiggly black marks to sing to us, to inspire in us an appreciation of beauty, and to infuse us with moral courage.

All of this is obvious, isn't it? Or is it? Pablo Freire, the guru of adult literacy in the so-called 'two-thirds world', has wryly commented, "Experience teaches us not to assume that the obvious is clearly understood." (1970:40). Worldview vastly alters the obvious from one culture and language to another. When one is engaged in the process of developing an alphabet for a previously unwritten language, he cannot assume that everyone will view his efforts with the same set of values.

Even though he chooses linguistically and pedagogically sound symbols, he may be misjudging the social-political context of the 'soldiers of literacy' in a given area. Consider, for example, the various perspectives on alphabets found in national governments and local communities.

National governments tend to think of alphabets as relatively uncomplicated and neutral tools serving their efforts to 'nationize' (Fishman 1972), that is, to forge a sovereign nation in such practical areas as educating its citizens, developing a solid economy, providing basic health care, and building roads. Mass literacy is viewed as a natural and proper goal for all progressive countries. Such governments are not apt to be concerned about detailed arguments as to why a minority language should have thus and thus symbols. Their concern is that the alphabet serve to unite their country and serve its citizens in a practical way. The argument that vernacular alphabets

will better help ethnic minorities to transfer reading skills to the national language(s) is what counts. What else would we expect from the highest governing body of the land?

At the other end of the spectrum is the **local indigenous community.** Initially such communities, especially the isolated ones, think of orthographies as something quite foreign and unnecessary for their own spoken tongue which has never before needed to be written. What useful or even ritual place does a list of arbitrary marks on a piece of paper have for a hunter-gatherer group? Or a tribal society? Even peasant societies may not see the sense of having their expressed speech form represented on paper. The availability of a written medium such as the language of wider communication (LWC) may seem to them more than adequate for the legal and economic activities which affect them.

Many Mayan peasant communities in Guatemala see the **concrete** sound as vital, **not** the **abstract** representation. It is the voiced prayer of the pastor or shaman which carries authority. The public reading of sacred Scripture is important for a ritual proclamation. The Mayan cultures and languages reflect a preoccupation with the concrete. If a grapheme is a symbol of sound, then the grapheme is the sound itself. Symbol is reality. There is no definite line between the abstract and the concrete. Faith is an empty word, but 'sitting your heart down on God's back' (Quiché) is concrete, real. Therefore, the whole idea of an alphabet being the abstract representation of the utterances coming out of the mouth is very strange.

As societies change and there is a movement towards towns and cities, the domain of written language develops. In fact, Jack Goody, social anthropologist and investigator of the impact of writing on societies asserts that

> '... if language is inextricably associated with 'culture', it is writing that is linked with 'civilization', with the culture of cities, with complex social formations, though perhaps not quite in so direct a manner. Nor is this only a matter of the implications for social organization, radical as these were in the long run. It is not just a question of providing the means by which trade and administration can be extended, but of changes in the cognitive processes that man is heir to, that is, the ways in which he understands his universe." (1987:3)

Minority groups can see writing and thus alphabets as a part of their culture in certain domains of use. Records of business

transactions; historical events during a ruler's reign; land titles; sacred writings; calendric calculations; the movement of the heavenly bodies; in the past all of these have been represented graphically.

Oral cultures have not needed writing and alphabets to keep track of their own oral literature. Amazing accuracy has been preserved in many of the African oral literatures. It is more our own Western value of writing that restricts us in understanding the different perspective of indigenous peoples who may keep the 'soldiers of literacy' strictly confined to the base.

In the multilingual societies so prevalent in the two-thirds world, many **members of ethnic minorities become bilingual** and multilingual in a way it is hard for us to imagine. In most such countries, formal education is received in a language other than the local vernacular. While the individual may still feel that 'broad and alien is the world' (Ciro Alegría: 1980), nonetheless traditional language and cultural values are changing. Many of these bilinguals still esteem their mother tongue as a viable spoken language but allow no need for a written domain. From their point of view, alphabets should serve as practical 'Peace Corps members' to facilitate intergroup communication instead of 'soldiers of literacy.' Therefore, if vernacular languages are to be written at all, their graphemes should facilitate using the LWC.

After enough time passes for these bilinguals to become secure in a job or social class in a more urban center, there is sometimes a nostalgia for their cultural heritage. If they are now able to defend themselves in the 'broad and alien world', then it is possible to look with favor upon their roots and even participate in a **revival movement.** Such movements are documented in many parts of the world, e.g., Peru, the Philippines, Nigeria, and Guatemala. Alphabets that represent the former mother tongue no longer need to be instrumental for carrying out certain business or practical functions. Rather they can be representative of the sentiments one has towards his heritage. Kelman called this a sentimental use of language (1971). Language and the necessary graphemes to represent it become more a distinctive symbol of identity rather than a medium of practical communication.

In Guatemala many such bilinguals with a reawakened appreciation for their own linguistic and cultural heritage are titled schoolteachers serving in the national bilingual education program. As they have prepared vernacular materials such as primers, school

dictionaries, and grammars, they have discovered that their languages really could function in the written domain. Kindled by the international fires of rising ethnic consciousness, and joined by other indigenes who have become lawyers, psychologists, sociologists, etc., they have begun to see themselves as an **elite group who could lead their own people** towards a recovery of their glorious past. For this Guatemalan Mayan elite, the alphabet has become a great rallying point for ethnic identity. As such they have moved away from the instrumental use of alphabets for preparing materials necessary to the bilingual education program. To better reflect their cultural identity they are urging that alphabets 'look more Mayan' and less like Spanish. In a more extreme instance an alphabet has been proposed based on elements borrowed from Mayan glyphs and excluding many Roman characters altogether. Clearly such a proposal reflects a desire that their alphabet express their separateness from the mestizo culture. Primacy has moved from an instrumental to an affective criterion for developing an alphabet.

When the affective use of alphabets as an ethnic identity symbol is strong, the Westerner's preoccupation with practical decoding and pedagogical issues appears irrelevant. How could it be otherwise?

Today the Mayan elite are interested in all aspects of their traditional history, including religion. At present a large body of literature exists in Spanish-like alphabets (more than 1400 titles), linking Mayan people to the intellectual, economic, educated, and religious world of the West. One way to break this link is by removing or invalidating this entire literature – and replacing the alphabet may be the only way to do this.

Indian and mestizo educators hold a different viewpoint from the elite who have temporarily lost their interest in the preparation of corpus materials such as school dictionaries and grammars, primers and easy reading books. Many of the education professionals in Guatemala and elsewhere recognize the practical necessity for ethnic groups to 'superarse' (try to do better), improving their lives socially, economically and educationally. Although they may also have come to respect and value their own cultural-linguistic background, they want no alphabets that would hinder their own people in making appropriate gains in the mestizo world. If the graphemes make it hard to transfer from the vernacular to the LWC, they are not considered valuable in the long term. Educators who are motivated to value ethnic minorities are often pulled one direction and then another as they try to make both instrumental and affective choices at

the same time. Two respected Mayan educators in Guatemala have been severely criticized by the ethnic elite for maintaining a functional instead of a sentimental viewpoint about alphabets.

Since bilingual corpus writers for autochthonous languages are concerned with how to develop sufficient didactic materials for the school system, they may lack patience with those who are concerned only with enhanced status of these languages and their alphabets.

Religious leaders tend to preserve or build tradition fitting their systems. Depending on what that tradition is and the existence of religious books, these professionals will uphold the alphabetic forms of the past, or of the LWC, whichever they are accustomed to decoding and proclaiming.

Poets, artists and literary figures regard language as a sacred vehicle for expressing beauty and truth. Writing systems and orthographic conventions are used to enhance and serve their art, certainly not vice versa. For these people sentiment is primary, not function, and meaning can be communicated on other levels than through practical orthographies. Winged seraphim would be thought more appropriate than 'soldiers of literacy'.

Thus the seemingly innocent 'soldiers of literacy' are viewed with varying degrees of usefulness and sentiment depending on the segment of national life in focus. We in SIL appreciate various perspectives. Sometimes, however, we get caught between our desire for a linguistically sound communicative tool and the surges of ethnic sentiment which we support but which may run counter to our practical goals.

III. Language Planning and the Alphabet Dilemma

Having reviewed the varying perspectives on alphabets which different sections of society espouse, I will now relate these perspectives to language planning.

Language planning may sound manipulative, even sinister! Usually, however, it is simply the attempt of national government agencies to **define and systematize the country's linguistic situation** so that all the functions of government can be contextualized in the various subgroups of its population.

History provides many examples of language planning attempts occurring long before the discipline of sociolinguistics and its

subdivision of language policy and planning came into vogue. The ancient Romans allowed local languages to remain but instituted government, law, and education in their own tongue. The modern state of Israel mandated a rigorous program of development which succeeded in reviving Hebrew as the spoken and written language of the nation. King James I of England inadvertently succeeded in standardizing the language of religion through his sponsorship of the translation of the Authorized Version of the Bible. The Spanish conquerors and later the criollo rulers of Guatemala and southern Mexico systematically sought to stamp out the indigenous Mayan languages. They succeeded in the written domain but failed to crush the spoken flower of the indigenous spirit.

All national governments must respond to the **presence of pressure groups who lobby for their own interests.** As language planners seek to make decisions about the language(s) of schooling, they will meet head-on the perspectives of the various groups mentioned in Section II as well as others who represent economic and business interests such as labor and agriculture.

If a country has a complex linguistic situation like India, it may be possible to respond to only certain interest groups. Cultural religious factors weighed heavily in India's decision to maintain two national languages, Hindi and Urdu (essentially the same linguistically), with their respective writing systems. Hinduism and Islam could not be accommodated with the same alphabet or script for what they deemed to be two such divergent streams. India has such a big job of language planning and policy decisions that they can scarcely handle the educational demands of eighteen different state languages, two national languages, one official (international) language, let alone three hundred minority languages. Corpus development will continue indefinitely.

In Thailand, language planners must consider four different scripts (Thai, Chinese, Arabic, Roman) when they consider the development of any of the tribal languages. Historical ethnic roots influence the approach to abstract representation of sounds. The Roman alphabet seems so manageable to us when compared with the problems of the Thai script. In China, the Chinese logographic traditional writing system covers all the variant dialects with no problems of sound-symbol correspondence. But think how few ever master the memory load. Modern Chinese bureaucrats are pushing the Roman alphabet as an aid to mass literacy. But how many sets of

written materials will then need to be prepared in which of the Chinese dialects?

North and Latin America face the challenge of incorporating indigenous groups into the national education system without completely assimilating them and thus destroying their cultures and languages. At one time in history SIL supported the introduction and continuation of avowedly transitional bilingual education programs in several Latin American countries. We understood that this token use of the vernacular would help students over the bridge from indigenous to mestizo culture. We purposely supported alphabets that would facilitate this transition. At the time it seemed better than no use of the autochthonous languages at all in schooling. Now, twenty-five years later in the Guatemala case, SIL is accused of supporting alphabets that have hastened the language shift to Spanish and death of indigenous cultures. We have been caught in our own tradition of supporting the national government. Now with the ethnic elite espousing a new alphabet as their banner of Mayan identity, a whole new dimension has been introduced into the subject of language planning.

In many countries in the world, language planners must attempt to stretch their meager resources of money, people, equipment and time in myriad ways. It is no wonder that policies are made that exclude the development of small languages. The long process of investigating and responding to language attitudes, positive and negative, can discourage the most enthusiastic. SIL could assist language planners by means of our extensive experience and knowledge of minority languages. Some alphabet changes may be required as a result. Some languages may never enjoy a robust vernacular literature. (See David Bendor-Samuel's thoughtful article, The Ongoing Use of Vernacular Literature. 1988) Unnecessary multiplication of dialect-specific literature is something that from the planners' point of view may need to be laid aside in some programs. Isolation from a nation's language planning and policy decisions is not possible. As an expatriate organization, SIL is too visible, too prosperous, too independent and has too many resources and trained personnel to neglect serious cooperation with government language planners. Nor is a polemic approach likely to help us in the long run.

National, regional and local infrastructures are readily exploited by those delegated to implement official language policy decisions. Whether it be the 'outback' or the 'bush' or the 'interior' or the 'boonies', SIL is probably there working with some minority language.

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Local people may not be aware of or able to influence alphabet or language policy decisions that affect their area. We may not agree with some of the policies, but it seems to me that we must continue to feed information to the authorities and appear to be conciliatory even when we'd rather holler. As an organization we see ourselves as championing the underdog, whether it be about alphabets or writing conventions or the language of the church or schools. Since we can maintain ourselves by independent means we might sometimes imagine ourselves as local language planners. We have the linguistic expertise and practical outlook to make appropriate decisions in the community. But our decisions, however technically correct they may seem, will in the end be only that--our decisions.

With the current emphasis on human rights and the rise of ethnic minorities, we will also have to make many alphabet and spelling decisions **interdependently rather than independently.** Some areas of the SIL world have been constrained to such partnership from the beginning. Others, like those of us in Latin America, have been moving slowly from a system which has been in effect benignly paternalistic to one of greater interdependence with both indigenes and nationals. Although we have good advice to offer, it may not be received by language planners – whether indigenous, academic, or official – as fitting their nation's goals.

At the level of the local community, one may find a great divergence of perspectives between the language policy makers and the local users of an alphabet. If we truly respect that difference we will need to find ways to work through it. It is not necessarily right to defend the local viewpoint always and at any cost. People out of the mainstream of national culture will soon have their world enlarged. We cannot and should not protect them from this but help in the transition if possible. The ever present challenge is to find the right balance between understanding the local and national perspective.

Sometimes the very people we have come to serve are the ones who 'plan' language use and manipulate alphabets in an unfortunate way, from our viewpoint. It will require great humility of spirit to work with antagonistic pressure groups and still salvage some workable policies which will help rather than hinder people in a local language community.

In the case of orthography changes, there are usually fewer problems in adapting to them than we have been willing to admit. In Guatemala we have been quick to defend the neoliterates insisting

that it will be too difficult for them to adjust to some grapheme changes. Admittedly it would not be our choice to have people who can barely decode a seemingly formidable page of print be required to change. But reports from around the world suggest that people can make the adjustment if they want to and have help. It has been claimed that most people don't want to, that they will give up reading instead. We certainly don't want anyone to give up the newfound skill of reading and lose the thrill of comprehending the message spelled out across the page.

In the Quiché area of Guatemala, we witnessed the effects of three orthography changes which were planned by others and instituted in Quiché literature. Neoliterates did struggle but not unreasonably so. Referring to some of the old conventions, e.g., using **gk** to represent the voiceless glottalized velar stop, Quiché people now laugh and remark how odd that was. It must seem odd now because Spanish never uses such a combination and the influence of it as a national language is more prevalent than fifty years ago. That symbol was changed to **c'** and now to **k'**. Each time readers adjusted. Of course, the newer the reader, the more he needs help to adapt.

The number of alphabet changes instituted all at once is another important factor to consider. If language planners on the national scene respond to a pressure group's plea to make extensive changes, the indigenous readers will likely come out of the woodwork and protest, or they will simply ignore the new policy and go on reading their old books.

Before laying all the credit or blame on language planners at a regional or national level, we in SIL must recognize our role as language planners. We are not even citizens of the countries where we work. We are foreigners. Yet the activities we engage in among ethnic groups promote the status of the language. Providing a translation of the Scriptures in a small vernacular language develops that tongue in vocabulary, especially with regard to loans and neologisms. Spelling conventions, punctuation, capital letters are all introduced from an outside western system. We analyze the vernacular higher level phonology and discourse features, but the influence of the LWC often obliges us to follow its orthographic conventions instead. In the village situation we function as an elite ourselves. In some places we affect decisions through partnership with highly educated churchmen or university professors or local cultural associations. Just our writing down the language assures some kind of future record of it, and that is language planning, too.

It is inevitable that we perform this function at different junctures in a language program, and we need to admit it.

We naturally expect and respect the right of sovereign governments to assess their linguistic situations and plan for some order in their response. Reviewing the linguistic data may be a very minor part in that assessment; more crucial will be the review of resources. Pressure groups will need to be considered and sometimes bowed to, sometimes resisted. We, too, are an inadvertent pressure group. Our unwitting influence will be evident in one way or another. Once again it will not be just the linguistic and pedagogical contributions we make in offering suggestions for alphabet design. Matters of sound-symbol correspondence, overdifferentiation (representing allophones), underdifferentiation (representing two phonemes with only one symbol), word division, script choices---all of these are of interest to language planners, but in the end the solutions may not follow our design. This is especially true in countries where there are national linguists who are expected to make these decisions, experienced or not.

IV. The Underlying Issue: Politics

The word 'politics' originally referred to the running of the public affairs of citizens in the Greek city states. Governments, of course, have tried to forge a unified nation out of smaller groups of people. War, economics, geography and religion have all played a part in how a relatively small group of people can arrive at the position where they govern others. Many people when thinking of politics raise their eyebrows, clear their throats and mumble something about how rotten it all is. Over the centuries the connotation of the term has degenerated to mean the inappropriate maneuvering and manipulation done by some people to gain influence and power over others through some organizational framework. Christians have often hesitated to become enmeshed in what has been called 'dirty politics'. Even in our SIL entities we are wary of maneuvering for positions of branch leadership. We say that it's too political. Yet we defend some of our actions by saying we had to do it for branch political reasons.

All of the above reminds us that we too are involved in politics! Officially, the politics is intraorganizational. However, in the countries where we serve, our work influences and affects national governments. Alphabets are a classic example. Our esteemed colleague, Bob Longacre, once quipped that orthography design is

more art than linguistic science. SIL's former International Literacy Coordinator, Tom Crowell, judged that alphabet symbols are chosen for thirty percent linguistic reasons and seventy percent because of nonlinguistic motivations.

One of our Central America Branch members, Boris Ramirez, who is himself a native Guatemalan, once laughed at me when I said that SIL's activities weren't political. 'Everything is political,' he insisted. As we talked I realized that there is a mixture of motives and factors which affect everything that happens in the governing process. Any unit of people, however big or small, is affected. Even the lining up of the 'soldiers of literacy' affects the future of a small unit of society which is in turn part of a sovereign nation.

Our choice of allocations for new teams affects the language politics of a country. If we choose to develop a vigorous program of linguistic analysis and Scripture translation and use, this implies that we will develop a written form for the language. Thus its status is automatically elevated and the corpus of written literature begun. If the president of the country is from this language group, fine. But if he is from a neighboring one, we may have a political problem. Sometimes very small languages are elevated to national language status because the president or the army general decrees it. In this way, SIL could find itself developing a language program that might never have been considered necessary.

Alphabets are approved or disapproved mainly for political reasons. We categorize these under subdivisions with labels like religion, education, psycholinguistics, sociolinguistics. When William Smalley wrote his now outdated but classic article, 'How Shall I Write this Language?' (1963) he referred to the difficulty of balancing all the factors which impinge on grapheme choice. He labeled these factors as follows:

1. Maximum motivation for the learner and acceptance by his society and controlling groups such as the government.
2. Maximum representation of speech.
3. Maximum ease of learning.
4. Maximum transfer.
5. Maximum ease of reproduction (1963:33).

The order listed was Smalley's perception of the weighted importance of each factor. Interestingly enough his first point would fall under our psycho- and sociolinguistic rubric today. Later, others critiqued Smalley's factors (Berry 1977; Venezky 1967, 1970; C.

Chomsky 1970) but they all concluded that despite the importance of each maxim, they were mutually conflicting. How was the decision to be made as to weighting the factors? Each situation called for an assessment of the history and present ambience. Different factors would be more weighty in different situations. A straight linguistic decision was rarely the most important. Political considerations concerning the acceptance of the alphabet by the language community, the educators, the elite, etc. would decide the issue in the end.

About ten years ago when Margaret Wendell developed and taught the curriculum for Principles of Literacy at SIL in Dallas, she included a mock orthography conference in which various perspectives were represented. Students were to study one of the viewpoints and then act at the conference accordingly. The local poet, the shaman, the schoolteacher, the farmer, the congressman, the linguist--all were represented. It was a hilarious, vivid experience to see the impossible conflicts which arose because of people's viewpoints. Each mock conference ended in a stalemate unless some political maneuvering was accomplished. Most of us who have served in a field entity know now that the mock orthography conference was only too true a picture of what it is like in real life.

In Guatemala, a branch of about 130 adult members, we invest $500,000 a year in the country through our presence, programs, technology and assets. This is a powerful influence to which some governments may respond with envy, fear or gratefulness. In our recent alphabet saga involving the independent formation of a Mayan Academy of Languages, we were acutely aware that we were labeled as an 'organización pesada', i.e. a heavy-weight organization. We protested but it was the view of the elite Mayans who formed the Academy that we could wield great political influence.

Another political influence SIL has is through our home country associations with Protestantism. Sometimes this is a negative political influence as in Latin America or North Africa, but it can be positive as in some subSaharan countries, the Solomon Islands, Vanuatu, Australia and Papua New Guinea. We assiduously strive to relate to all and to carry through on our wise nonsectarian stance. But we cannot escape the political baggage we carry because of our logical association with evangelical Christianity. Our baggage has been so heavy in Guatemala that there has been a danger of a division between Catholics and Protestants over the alphabets. This type of

experience is a sober reminder that we are painted by political pressure groups with their own brushes, not ours.

SIL's association with the academic community is another political factor. In Guatemala we cosponsor a School of Linguistics at a private university operated by four Protestant professionals. Although we have had some teaching opportunities in the national university and a private American-funded university, we have never been able to make a long-term contribution there or at the Catholic universities. Our influence on the seventy-five students enrolled in the University of Mariano Gálvez is considerable. Sixty of these students are Mayans and the majority are bilingual teachers. At the university, our SIL professors have been able to experiment in a neutral atmosphere with the Mayan Academy alphabet changes, now officially decreed by the President and Minister of Culture.

Studying the national scene in any country will reveal certain trends affecting our work in general and in this case, orthography issues. I have chosen seven trends which have political spin-off in Guatemala but which I also perceive to be significant internationally.

1. **NATIONALISM.** Besides the rise of independent nations in the two-thirds world, there has been a rise of ethnic nationalism which strongly affects political rhetoric and the status assigned to minority languages. In Guatemala, Mayan languages, especially the four large groups, have a political visibility never seen before. Alphabet decisions are affected by this. Joshua Fishman (1972) talks about the task of 'nationalizing' a country. This refers to the building of a strong national spirit and unifying the people around common symbols and heritage. The ethnic resurgence in Guatemala has become important to a government which wants to appear as pro-Mayan, although of mestizo background itself.

2. **NATIONISM.** Previously I referred to this concept of Fishman's (1972) as the practical task of a government in providing services that are expected, e.g., education, health care, roads. This is a counterbalance to #1 which focuses more on national pride. The great drive for the government to be successful in 'nationizing' is hindered by a lack of monetary and personnel resources. Alphabet issues are shaded by various colors in this process.

3. **UNITY.** Nations who need to build patriotism as well as provide practical help to their citizens cannot afford to allow ethnic languages and cultures to divide the country. SIL has been criticized

in Guatemala about overdifferentiation of dialects, failure to standardize across large language groups, and undue focus on language variation. These three points, of course, heavily affect the formation and acceptance of a practical orthography.

4. **EDUCATION FOR ALL** and a striving for universal literacy. Around the world people expect governments to deliver increasingly good educational services. More schools are built and more and more previously isolated areas are being touched. National literacy campaigns are regularly pushed. The international publicity received by Nicaragua and Cuba concerning their literacy campaigns (Arnove 1973; Freire 1970) reveals the intensity of spirit and organization which two-thirds world countries can muster. Alphabets can be tested and propagated through these kinds of campaigns.

5. **COMMUNICATIONS MEDIA.** The explosion of nonprint media in the world has influenced even very isolated groups. Radios are much more important in many rural settings than outhouses or home improvements. Video is moving to overtake television. Improvement of roads and transportation means that more people are exposed to the larger world. Whether or not conflict over orthographies will abort some literacy efforts in favor of mass media oral communication is not yet known. The integration of print and nonprint media (video, audio) can make SIL language programs more effective in many situations. This has been true, for example, in North America, Australia, Guatemala and the Philippines.

6. **THE SHRINKING WORLD,** Marshall McLuhan's 'global village'. Geographical features no longer divide one language community from another so completely. The question is not **if** people will be exposed to the outside world but **when?, how?** The drive for international literacy could spread a Roman alphabet to areas which have always had their own literary tradition and script. English, as an international language, is a powerful influence.

7. **SPREAD OF MARKET ECONOMIES.** Although there are still many subsistence agriculture societies, the rise of other nontraditional exports and industrialization even at modest levels is bringing a market economy to more small indigenous communities. According to Goody (1987) this will increase the need for a written domain in previously oral cultures.

V. The Challenge: Balance and Service

Alphabets are an important vehicle to carry the printed word. Their composition seems crucial to us from our field work viewpoint, especially when we can design them so nicely in a vacuum! When we take out the cork and the vacuum is gone with a pop, we begin to get confused ourselves. If we examine the counsel of Goody (1956,1987), Smalley (1963), Berry (1977), Venezky (1970), and Carol Chomsky (1970) again, we will be reminded of how many factors are involved and how muddied the issues become.

In the recent Notes on Literacy issue on orthographies (1989), there are articles by Jean Dawson, Ursula Wiesemann, Pat Kelley, Roberta Hampton and Dot Thomas, all experienced and competent in the field. The combination of articles illustrates again the complexity of interrelationships in orthography matters the world over. Looking at linguistic and sociolinguistic factors in tandem, we realize how bilingualism and diglossia will affect the psychological and auditory perception of phonemes and language variation. The social context of the indigenous language will also be impinged upon by other languages, including the national and any international language(s) present. Ease of learning will become more complex as we consider whether we want new readers to spend less time learning in the first place and more time transferring to the LWC or vice versa. How closely related are encoding (writing) and decoding (reading)? Should spelling and orthographic rules be affected by bilingualism, language contact, language shift? What about the reproduction of written material? Shall we print in all the scripts? How many in one book? Will desktop publishing invade the jungles, the deserts, the mountains? Will multidialect orthographies have a chance for survival when up against the LWC alphabet? Can we write underlying forms like some of the native Latin American linguists suggest? Questions! Questions! More questions, but few black and white answers.

In the final analysis we are concerned with meaning more than symbol. But the selection of abstract symbols to represent real sounds becomes increasingly complex when factors to be considered are so mutually conflicting.

As an academic organization SIL has made some significant contributions to orthography studies. For example, Pike analyzed tone and the Mexico Branch members struggled with assessing its functional load and graphic representation. Sarah Gudschinsky, of

course, solved numerous tough orthographical problems around the world and contributed her no-nonsense, practical understanding from a teacher's point of view. Ernie Lee systematized and elaborated on Gudschinsky's contribution. Ray Gordon reformulated criteria for alphabet design and morphophonemic writing. Ursula Wiesemann applied her insights to standardization. Gary Simons led the way through the maze of multidialect orthographies.

Yes, SIL as an organization can suggest; we can supply data; we can keep talking and negotiating; we can persevere when the present alphabet crises are forgotten. We can be conciliatory in the face of opposition and refuse to let our opponents divide us or invalidate our existing literature.

If our conciliatory stance seems only politically expedient, may it also be recognized as a prudent way to continue to serve in the countries where ethnic minorities are demanding attention, as well as in those where they are still hidden 'behind the ranges.'

As David Weber poignantly commented in a letter (Weber:1989),

> "The politically expedient thing for us [to do, of course,] is to toe the line of this [ethnic] elite. But this sometimes puts us into the position of working against the best interests of the people we are there to serve."

That is the challenge: be conciliatory and willing to supply data and manpower, even money at a national level; but also seek the best interests of the local people we long so much to serve. To neglect either strategy will be to blur our unique SIL vision.

[1]I wish to acknowledge the stimulation and help given to me on alphabet issues by SIL colleagues in the CAB, especially Katherine Langan and Merieta Johnson. In addition, Steve Walter and David Weber's correspondence was of great assistance.

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WORD BREAK PROBLEMS IN YAWA ORTHOGRAPHY

Linda K. Jones

Linda obtained a PhD degree in Linguistics from the University of Michigan in 1977. Her husband, Larry, and she have worked with the Yawa people in Irian Jaya, Indonesia, since 1982. They have three young children.

I. Introduction
II. Word Break Problems
III. Further Testing
IV. When Problems Remain
V. The Final Test
VI. References

I. Introduction

The phonology of the Yawa language (a Papuan language of Irian Jaya) has been described in two papers; the first (1986a) concerned the Sarawandori dialect on the south coast of Yapen Island, while the second (1986b) concerned the Rosbori dialect on the north coast of Yapen. The latter dialect is virtually identical with the dialects spoken in several other north-coast villages, as well as the very large interior village of Ambaidiru (seven hundred people) and its neighbor, Mambon. We will call this dialect area the Central Dialect; it is the principal area targeted for the Scripture translation. The rest of this paper will concern this dialect.

In Jones 1986a and Jones 1986b is found the proposed alphabet for the Yawa language. After another year of using this alphabet in various types of written literature (including a limited distribution of the first draft of Mark and a limited distribution of a medical workers' manual), we are satisfied that the letters proposed for the alphabet are entirely satisfactory. I have studied thirty letters composed by more than a dozen Yawa speakers. The spellings of words in these letters use all and only the letters in our proposed alphabet, and conform very closely to spellings we would have suggested. It should be noted that with the exception of three of these writers who had been trained by us, the others were all 'naive', meaning that they spelled in Yawa based on their experiences with Indonesian and their intuitions about their language. While there will

still be the occasional problem of how to spell a particular word, we are confident that the spellings that would result from the use of our proposed alphabet will be easily read and understood by the people.

II. Word Break Problems

The only remaining problem that we see regarding orthography, then, is the matter of word divisions (word breaks). There is no stress rule in Yawa that indicates the boundaries of a word, nor are there consistent phonological rules. Furthermore, there is a considerable number of clitics that are bound phonologically to an adjacent word (usually a preceding word, as most are enclitics), but might in many cases be considered to be grammatically separate words. There are also some other morphemes that perhaps are not technically clitics but seem to behave similarly.

Examples include the alienable possessives (such as *sya*, first person singular, *apa*, third person masculine), the article *so* 'the, this', the general locative marker *no*, the locative/instrumental marker *rai*, and certain directionals such as *aje* and *asyo* 'down'.

The question is: do we write these clitics/morphemes as separate words or as joined to the word that they tie to phonologically? This is an important orthographical matter to decide as these morphemes are very prevalent in the language, occurring several times in virtually all sentences.

There are approximately forty morphemes that seemed problematical in this way. I did not make any a priori decisions regarding them, and furthermore, did not assume that there would be a blanket rule that they ALL should be written as separate words, or conversely, that they ALL should be joined. Instead, my first step was to examine the thirty letters that I mentioned above for the occurrence of these morphemes, to see how Yawas themselves treated them. I was not able to include every occurrence of each morpheme in the study, as the writers were not always clear in marking word breaks. But where I could clearly assess the word breaks, I made a tabulation of the morphemes as to whether they were written as separate words or joined.

III. Further Testing

Subsequently, two tests were conducted to obtain more evidence. The first test consisted of naive reader checks on three brief

conversations in Yawa. The conversations included many of the morphemes in question. Each conversation was typed up in three versions, with a nice distribution of the morphemes in question being joined versus being separated from other words. Our concern was to notice places where a naive reader stumbled or had a great deal of difficulty.

The second test asked some of our language helpers (therefore, NOT naive) to decide between separating or joining the morphemes as they occurred in the translation of Mark. The problem morphemes were located in Mark and then samples were typed up which showed each morpheme in question joined as well as separated. The 'joined' and 'separated' samples were typed one under the other for easy comparison, then the language helpers were asked to indicate which way they preferred.

The results of both the naive reader test as well as the test of the language helpers on Mark were tabulated, then compared with the results of examining the thirty letters composed by Yawa speakers. The three studies gave corroborating evidence in the case of many morphemes. We may make definitive conclusions in these cases. There was also some conflicting evidence. We have reached tentative conclusions in these cases, weighing the evidence.

IV. When Problems Remain

Some sage advice from literacy specialist Jean Dawson has been helpful in reaching conclusions about the problem morphemes. I summarize here what we learned from her.

There is a significant difference between beginning readers and fluent readers in their reading strategy. Beginning readers tend to 'sound out' words, letter by letter. They pay attention to the sounds as they are reading in order to derive comprehension. On the other hand, fluent readers generally recognize words as units. They no longer read by sounds, but are able to grasp words directly as wholes. The word for them is the basic unit of comprehension.

This difference in reading strategies may be reflected in the preferences each type of reader has regarding word breaks. Since the beginning reader goes by sound units, he prefers not to break up that unit. However, a sound unit may or may not be coequal with a word. In languages like Yawa, where clitics are abundant, many sound units are phrases, not words. Thus, the beginning reader may prefer

phrases to be written without any word breaks, because 'that's how it sounds when he talks'. By contrast, the fluent reader comprehends words as whole units. He needs breaks between words in phrases because he reads by words. If the words are run together, his basic reading strategy fails. He is slowed down trying to untangle the run-on words.

The conclusion to be reached in the case of Yawa, then, as well as other languages with clitics, is that the grammatical status of each problem morpheme must be determined before making a decision regarding whether to join or separate it from other words. The issue here is the GRAMMATICAL status of the problem morphemes, leaving aside their phonological status. Specifically, for each morpheme, ask: Is it arguably a grammatical word? What is the evidence? (For a good discussion of criteria for a grammatical word, see Pike and Pike 1983.)

A corollary of these reading principles is as follows. If you are trying to follow good CD (community development) practice and include the people in making decisions about the orthography of their own language, keep in mind the difference between beginning and fluent readers. If most or many of the people involved in making the decisions are beginning readers, then you may end up with some decisions that are bad in the long run. Better choose only fluent readers! Probably one reason we obtained conflicting results with some of the morphemes we were testing is that we had a mix in abilities among our readers.

V. The Final Test

After we have examined carefully the grammatical word status of each of our problem morphemes and reached a decision for each regarding whether to treat it as a separate word or not, we still need to do one final test. This is to monitor how readers do in reading the word breaks that we decide on, especially paying attention to fluent readers. Since Scripture is too difficult material to constitute a fair test, we plan to first make and distribute a number of simple picture readers. In the case of Yawa, we do not need to write a basic learn-to-read primer series (we think) because most of the villages have had primary schools for at least a generation. Our challenge is rather to help the people transfer whatever reading skills they have acquired in Indonesian to Yawa. To do this, we need to expose them to reading material in Yawa so they can become familiar and comfortable in

reading their own language. At that point, we can observe their facility in handling the word breaks we have proposed.

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How to Obtain Obscure Technical Articles

Wycliffe Associates in Britain has initiated a new service. They now have access to the British Library which has a vast range of materials. From them they can obtain a copy of virtually any technical article which has been published. This service is available to any member of the Summer Institute of Linguistics, at minimum cost. A Technical Article Order form must be submitted, which is obtainable from Mrs. Elizabeth Storkey, 111 Midhurst Road, Birmingham B30 3RA, England. Only one article per form may be requested; the form, however, may be photocopied.

Learning styles and beginning readers

Carbo, Marie, Rita Dunn and Kenneth Dunn. 1986. **Teaching students to read through their individual learning styles.** Englewood Cliffs, NJ: Prentice-Hall. Reviewed by Carolyn Kent

A number of years ago a mother came to me to express her frustration over the fact that her daughter was not able to learn to read using the phonics method. As we commiserated, she finally exclaimed, "Oh, I just wish all the kids could be thrown into a giant computer to see who could learn from phonics and who couldn't." At the time it sounded pretty farfetched; however, with Carbo's current work, that time may have arrived.

In this book, Carbo takes the earlier work of Dunn and Dunn on learning styles and applies their findings specifically to the teaching of reading. Dunn and Dunn contend that rather than looking at the learning styles of individuals as simple dichotomies between *x* and *y*, each person is a unique combination of factors which fall under five categories: "a) immediate environment, b) own emotionality, c) sociological needs, d) physical characteristics, and e) psychological inclinations" (p. 2).

Carbo suggests that for optimum learning to take place, instructional methods and materials must be matched to the learning preferences of the students. In order to accomplish this, she has developed a computerized Reading Style Inventory. The computer can produce a profile for an individual student or for all the students in an entire classroom, showing such things as, for example, which students have perceptual strengths in auditory, visual, tactual, and kinesthetic areas.

In the remainder of the book, Carbo does an excellent job of suggesting specific ways of matching reading methods and individual reading styles and in providing appropriate materials for various reading styles. The book provides an excellent overview of available options in terms of materials and even includes many do-it-yourself ideas for enriching the reading experience of students having a variety of styles.

This book is an excellent addition to the library of anyone interested in applying learning styles theory to the teaching of reading. The only major drawback may be the need to order the computerized version of the test if you want to actually apply her ideas. A further problem is the question of how we might develop a similar learning styles inventory in minority languages. In spite of these problems, there is much in the book which is worthwhile and applicable to other languages and cultures.

ORTHOGRAPHY DIFFICULTIES TO BE OVERCOME BY DAN PEOPLE LITERATE IN FRENCH

Margrit Bolli,

Côte d'Ivoire

I. Introduction
II. Interference of the French orthography
    1. Inconsistency of Spelling in French
    2. Difference in Word Structure
III. Implications of Orthographic Differences for the Teaching Process

I. Introduction

The Dan (or Yakouba) people live in the central west of Côte d'Ivoire and number roughly 500,000 speakers. At least another 100,000 speakers of the same language live in neighboring Liberia where they are called Gio.

The Dan language is a member of the southern subgroup of the Mande language family. The eastern dialect on which this study is based has a system of fifteen oral vowels, one syllabic nasal vowel and seventeen consonants. In addition, it has a basic system of five level tones as well as an additional set of falling tones.

An SIL team (Eva Flik from Germany and Margrit Bolli from Switzerland) started work on the Dan language in 1970. Following an initial dialect survey done at the beginning of the project, it was discovered that two full literacy/translation projects were needed in order to adequately cover the whole Dan area: a western Dan project and an eastern Dan project.

Rather than waiting for the first project to be finished, the second was initiated as soon as 1974 when a trial orthography had been developed in the western dialect.. All literacy and translation efforts have been led doubly ever since. The Dan love their language and need no great motivation campaigns to bring them to the literacy classes. Interest for reading in Dan is high only with hitherto illiterates but also with those who are literate in French.

So far, Dan people literate in French have attended village classes, going through the whole set of primer lessons alongside the

first-learners. This has been quite satisfactory for most of the learners; however, there are more and more people interested in reading the translated books of the New Testament who do not have the time to go through this rather long process, especially city dwellers and church leaders. A more suitable course has been worked out for these people. This paper tells about the difficulties Dan readers of French may have when learning to read their own language and how they can overcome them.

II. Interference of the French Orthography

French is the official language of Côte d'Ivoire. All schooling from primary to university level is done in French exclusively. People who want to learn to read their own language have to seek ways outside of the official school system.

It is a truism that once a person has acquired reading skills in a language, he quite naturally wants to transfer these skills to any other language he is learning to read, his own included. A Dan having learnt to read the French language and wanting to make the transfer to the orthography of his own language expects the latter to be exactly like that of French, in appearance as well as in nature. Anything deviating from it rouses his suspicion, he feels threatened, especially as the orthography he has originally learned is that of the prestige language of the country.

When we had developed the trial Dan orthography back in the early 1970's, the local church leader looked at a printed page and said: "We won't ever accept this way of writing with those funny signs in front of every word!" It took us some time to convince him that these funny signs were necessary as they represented the tone marks absolutely necessary to allow for correct reading. The same man said a couple of years later: "I really love these little marks--they are like signs by the roadside; in reading them you know exactly where to go!" He had come to understand that his language has particularities of its own which need to be reflected in the orthography. It is these particularities which make the orthography of a given language different from the orthography of any other language. This short study focuses on some of the differences between the French and the Dan orthographies and the implications these have for the Dan literate in French, once he wants to learn to read his own language. This does not, however, pretend to be an exhaustive treatment of the subject.

There are in fact considerable differences between the French and the Dan orthographies, such as inconsistency of spelling and other differences which have their origin in the word structure of the two languages.

1. Inconsistency of spelling in French

One important difference between the French and the Dan orthographies is that of inconsistency of spelling in French on the one hand and of precise phonemic representation in Dan on the other hand. The inconsistencies of spelling in French have their origin in the long history of written French. Whereas the spoken language has undergone many changes, the written language has not done so to the same degree. One result of this is the 'silent letters', as well as over- and underrepresentation of phonemes.

1.1 'Silent letters'

The French orthography has many words containing 'silent letters' ('lettres muettes') which are written but not pronounced. This is the cause of constant headache for writers of French, native speakers of French included.

Examples:

e	in 'il chant*e*'	'he sings'
te	in 'chouet*te*'	'barn-owl'
ent	in 'ils entend*ent*'	'they hear'
f	in 'cle*f*'	'key'

etc.

A Dan who is literate in French will watch out for those 'silent letters' when turning to read his own language. He will be suspicious or disappointed if he does not find any. He needs to know that in Dan every orthographic symbol represents an element of the language which must be pronounced.

1.2 Overrepresentation of phonemes

Another inconsistency of spelling is that of overrepresentation of phonemes in the French orthography. One phoneme may have more than one orthographic representation, as for example the phoneme /k/ which is spelled in at least four different ways (k, c, qu and ch).

Examples:

k	in	karite	'karite'

	in	kapok	'kapok'
c	in	cas	'case'
	in	colle	'glue'
qu	in	quatre	'four'
	in	quartier	'quarter'
ch	in	choeur	'choir'
	in	chaos	'chaos'

The Dan orthography has followed the principle 'one sound - one symbol'. The phoneme /k/ is always written in the same way.

Examples:

'kɔ	'house'
-kəə	'sugar cane'
"klŋŋklu	'healthy'

1.3 Underrepresentation of phonemes

In the case of underrepresentation, an orthographic symbol represents more than one phoneme. In French, the letter *o* may represent the phoneme /o/ as well as the phoneme /ɔ/.

Examples:

coco	/koko/	'coconut'
coca	/kɔka/	'coca plant'
lot	/lo/	'plot of land'
lote	/lɔt/	'fish (species)'

(One might argue that, in French, /o/ and /ɔ/ are not separate phonemes. There are nevertheless minimal pairs which prove that they are. Example: /sot/ 'jump'; /sɔt/ 'foolish woman'.)

In the Dan orthography, *o* always stands for the phoneme /o/ and ɔ for the phoneme /ɔ/.

2. Difference in word structure

2.1. Polysyllabicity in French

Another important difference for a Dan reader, already literate in French wanting to read his own language, is that of polysyllabic versus monosyllabic word structure. French is a polysyllabic

language, whereas Dan is a monosyllabic one. Roughly, ninety to ninety-five percent of Dan words consist of one syllable only. Polysyllabic languages like French have an almost unlimited supply of possible syllable combinations. The French phonemic syllable /ka/ occurs in hundreds of combinations with other syllables to form words.

Examples:	
calebasse	'calabash'
caleche	'open carriage'
calendrier	'calendar'
calepin	'notebook'
casserole	'saucepan'
califourchon	'astride'
cartable	'satchel'
calomnieusement	'calumniously'
camerounais	'cameroonian'
capuchon	'hood'
canif	'penknife'
cavalerie	'calvary'
etc.	

In learning to read French, a great deal of energy and time goes into the painful spelling out of long words. This problem is almost nonexistent in Dan.

2.2 Monosyllabicity in Dan

A monosyllabic language does not have the combination possibilities a language like French has to arrive at the necessary stock of word forms. It has to find other ways to build up this stock. The Dan language (eastern dialect) has a system of as many as fifteen oral vowels. The many possible consonant-vowel combinations form the basic instrument on which the Dan language plays to arrive at its necessary stock of word forms. To do this it uses the five following devices:

a) Tone
b) Lengthening of Vowels
3) Nasalization
4) Lateralization

5) Labialization

a) Tone. Completely unknown to the French language, tone is a major device of the Dan language to generate different word forms. In the eastern literary dialect of the Dan language there are five level and three falling tones that can occur on a simple consonant + vowel syllable. These tones are represented by punctuation marks in the orthography. Taking the same phonemic syllable /ka/, we arrive at the following word forms on short syllables:

Extra high tone:	" ka +
High tone:	' ka +
Mid tone:	ka +
Low tone:	= ka
Extra low tone:	- ka +
High-falling tone:	' ka- +
Mid-falling tone:	ka- +
Low-falling tone:	= ka-

Thus tone generates eight possible word forms with the simple syllable *ka*. Out of these eight possible word forms, the Dan language uses as many as six (marked with +). Tone marking is absolutely essential to distinguish these otherwise identical word forms.

b) Lengthening of vowels. The eastern Dan has a system of fifteen vowels, all of which can occur either singly or as sequence of two. Combined with the different tone patterns allowed on a *ka* syllable, the long *kaa* syllable may occur with three more tone patterns: extra high-falling, mid-high and mid-extra high tone. We therefore gain eleven more word forms. They are the following:

Extra high-extra high tone:	" kaa +
High-high tone:	' kaa +
Mid-mid tone:	kaa +
Low-low tone:	= kaa
Extra low-extra low tone:	- kaa +
Extra high-falling tone:	" kaa-
High-falling tone:	' kaa- +
Mid-falling tone:	kaa- +
Low-falling tone:	= kaa-
Mid-high tone:	kaa'
Mid-extra high tone:	kaa" +

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Out of these eleven possible *kaa* word forms, the Dan language is using as many as seven (marked +).

c) Nasalization. Another device to generate Dan word forms is that of nasalization which is marked by an *n* at the end of the word. All Dan monosyllabic words are either oral or nasalized. In the case of the *ka* syllable, this means that we can double the number of possible word forms.

With the feature of nasalization (and that of tone and lengthening of vowels), we gain the following nineteen possible word forms:

" kan +	" kaan +
' kan +	' kaan
kan	kaan +
= kan	= kaan
- kan +	- kaan +
' kan- +	" kaan-
kan-	' kaan-
= kan- +	kaan- +
	= kaan- +
	kaan'
	kaan"

Out of these nineteen possible word forms, ten are used by the Dan language speakers.

d) Lateralization. Yet another device to create word forms is the feature of lateralization which consists of the insertion of an *l* after the consonant. The feature of lateralization (in combination with tone, lengthening of vowels and nasalization) gives us the following thirty-eight possible word forms:

" kla +	" klan +	" klaa +	" klaan
' kla	' klan	' klaa	' klaan
kla +	klan	klaa	klaan
= kla	= klan	= klaa +	= klaan +
- kla +	- klan	- klaa	- klaan
' kla-	' klan-	" klaa-	" klaan-
kla-	klaa-	' klaan-	' klaan- +
= kla-	= klan-	klaa-	klaan-

= klaa-	= klaan-
klaa'	klaan'
klaa" +	klaan"

Out of these thirty-eight additional word forms, nine are used by the Dan language speakers.

e) Labialization. The feature of labialization consists of a labial release of the consonant and is marked with a *w* written after the consonant. This feature (in combination with the features of tone, lengthening of vowels, nasalization and lateralization) gives us the following additional seventy-six word forms:

" kwa	" kwan	" kwaa	" kwaan +
' kwa +	' kwan +	' kwaa +	' kwaan
kwa +	kwan	kwaa +	kwaan
= kwa	= kwan	= kwaa +	= kwaan +
- kwa +	- kwan	- kwaa +	- kwaan +
' kwa- +	' kwan-	" kwaa-	" kwaan-
kwa- +	kwan-	' kwaa- +	' kwaan-
= kwa-	= kwan-	kwaa- +	kwaan-
		= kwaa-	= kwaan- +
		kwaa'	kwaan'
		kwaa"	kwaan"

" kwla	" kwlan	" kwlaa	" kwlaan
' kwla	' kwlan	' kwlaa	' kwlaan
kwla	kwlan	kwlaa	kwlaan +
kwla	= kwlan	= kwlaa	= kwlaan
- kwla +	- kwlan +	- kwlaa	- kwlaan
' kwla-	' kwlan-	" kwlaa	" kwlaan-
kwla-	kwlan-	' kwlaa	' kwlaan-
= kwla-	= kwlan-	kwlaa-	kwlaan- +
		= kwlaa-	= kwlaan-
		kwlaa'	kwlaan'
		kwlaa"	kwlaan"

Out of these additional seventy-six word forms, twenty are used by the language speakers.

In conclusion, the impressive sum of 152 word forms can be generated from the simple *ka* syllable using all the different devices

the Dan language has at hand. Out of these 152 word forms, over one third, i.e. fifty-eight, are used by the language speakers.

There are, however, some restrictions as far as the occurrence of the five word-creating devices is concerned: nasalization occurs only with nine out of the fifteen vowels and labialization occurs with /k/ and /g/ only.

As far as the French language is concerned, it also uses some of the features mentioned above. However, the functional load in French is in no way as high as in Dan where each additional feature immediately creates eight new forms with the different tone patterns possible on a simple syllable. The following features are used by the French language, although the terminology normally used to describe them may be different:

- nasalization:	in 'camp'	/kã/ 'camp'
- lateralization:	in 'clarification'	/kla/ 'clarification'
- labialization:	in 'quoi'	/kwa/ 'what'
- nasalization + lateralization:		
	in 'clan'	/klã/ 'clan'

III. Implications of Orthographic Differences for the Teaching Process

A Dan reader of French, when turning to read his own language, needs first to go through a mental stripping process to rid himself of set ideas on orthographies acquired throughout the learning process of reading in French but which do not apply to reading in Dan.

When this stripping process has taken place, he needs to focus on the particularities inherent in his own language which are reflected in the orthography. The main feature he will have to focus on is the writing of tone. French does not have this feature at all, whereas in Dan it is of paramount importance. It is absolutely essential that a reader of Dan arrive at an instant recognition of the eleven tone patterns, one or the other of which is used to mark the roughly ninety to ninety-five percent of Dan words. He needs to catch at a single glance the tone-consonat-vowel combination each monosyllabic word constitutes. Without this skill he will never be fluent in reading his own language. But once this skill is acquired--through a whole series of exercises--he will read as fluently and as easily as a French reader reads his own language.

We have developed a transition course for Dan people literate in French, by means of which it is possible for them to learn to read their own language in just four or five lessons which can be taught over two or three days. The course consists of five teaching blocks which are the following:

1– Stripping process (–explanations of French orthography rules which do not apply to the Dan orthography);

2– The teaching of tone (–a complete series of tone awareness drills followed by tone pattern recognition exercises);

3– The teaching of the Dan vowels with all the possible modifications (–with explanations of the differences from the use of the French vowels);

4– The teaching of the Dan consonants (–with explanations of the differences from the use of the French consonants);

5– Specific orthography rules.

The reader may not yet read very fluently after this short course, but he gets all the mechanics to go on on his own. The course has been tried out with very satisfying results and we hope that it can be adapted to serve other Côte d'Ivoire languages as well.

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ANALYZING AMBIGUITY IN ORTHOGRAPHIES

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I. Introduction

It is common to speak of 'ambiguity' in orthographies. We impressionistically quantify this, speaking of a 'high degree' or 'low degree' of ambiguity. We would like to define and differentiate two *dimensions* that contribute to the 'degree of ambiguity' in orthographies. After discussing the two dimensions of ambiguity, we will also differentiate between two *types* of ambiguity. One of these two types will be further subdivided, though we admit that these may not be totally discrete categories.

This paper describes ways to analyze ambiguity, but does not directly address the problems created by ambiguity in orthography. There are greatly differing opinions on how much ambiguity an orthography can and should have, though it is unlikely there is one standard answer to all situations. We do not involve ourselves in this debate. Instead, our contribution is in providing concepts to allow for a more precise, informed discussion and judgement on such matters.

This paper treats reading and the recognition of words as being very closely linked to pronunciation and phonological processes. Fluent readers generally process written forms in different, more

efficient, and less phonological ways, but we believe that this paper addresses the problems of orthographic ambiguity in a way that more closely reflects the problems and mental processes of new readers.[2] The problems of orthographic ambiguity can also affect fluent readers (though they will be more likely to utilize context and redundancy). "The optimal orthography for a beginning reader is not the same as for a fluent reader" (Dawson 1989:1), but both can be hindered by ambiguity.

When literacy workers and linguists decide whether certain features will be marked in an orthography, such as tone, they usually try to measure whether the omission of a certain feature creates too many cases of ambiguity. A good knowledge of the language, together with proper testing, will help decide how many ambiguous words (or sentences) are created if the feature is omitted. If the omission of a certain feature does not create many potentially ambiguous words or sentences, the orthography is judged to have a 'low degree of ambiguity'. Though meaning is sometimes ambiguous in such cases, if the number of such ambiguous cases is low, readers can (supposedly) rely on context to disambiguate meaning. On the other hand, if the omission of the feature creates a large number of possibly ambiguous words or sentences, then this orthography is judged to have a 'high degree of ambiguity'.

II. Dimensions of Ambiguity

We measure ambiguity in two dimensions, what we call 'frequency' and 'depth'.

1. Frequency of ambiguity

Frequency of ambiguity is related to the number of times that an ambiguous form is found in written material. That is, "How often will the reader encounter this ambiguity?" If every vowel in the orthography is ambiguous as to length (and length is phonemic in the language), then the 'frequency' of ambiguity is high.

As with phoneme frequency counts, the frequency of the occurrence of ambiguity may differ between studies of text and studies of the lexicon. For example, Amharic has phonemic gemination, but the syllable-based orthography does not show gemination. In the Amharic lexicon, there are relatively few pairs of words that differ only by consonant gemination. In text, however, the number of ambiguous forms (what we will later identify as

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'semantically ambiguous') is much greater than in the lexicon. This is based on two factors, first, the relative frequency of the verbs *allə* 'it is' and *alə* 'he said'. Also, the active and passive forms of verbs from a verb class labeled Group II (when based on the 'contingent' stem[3]) are ambiguous in the orthography because they differ only by gemination. In this case, the frequency of ambiguity in text is significantly higher than in the lexicon. Careful study of this problem in other languages may lead to similar or opposite conclusions.

2. Depth of ambiguity

The other dimension of ambiguity is 'depth'. Depth of ambiguity is related to the number of different values a symbol or digraph (or even trigraph) can potentially have. For example, in a two-tone language, if tone is not marked, every vowel (or syllabic consonant) will have a tonal ambiguity whose depth is two, e.g. bák and bàk. If, in addition to omitting tone, the orthography for this two-tone language also omitted vowel length, the depth of ambiguity for the orthographic form 'bak' would be four, e.g. bák, báák, bàk, bààk. (If heterotonic vowel sequences were found in the language, the depth would be six, allowing báàk and bàák.)

As more phonemes are not symbolized in the orthography, the depth of phonological ambiguity increases greatly. Gudschinsky asked, "Is it possible that ambiguity increases in geometric proportion to the number of contrasts eliminated?" (1970:22). The answer to her question is "yes", if we interpret her question as referring to the 'depth of phonological ambiguity'. That is, in the above example, the loss of one contrast (tone) produced a depth of two, the loss of length added to the loss of tone produced a depth of four. The loss of a further phonemic contrast, e.g. vowel nasalization, would produce a depth of phonological ambiguity of eight. In this example, the depth of ambiguity is calculated for each syllable, so polysyllabic words could have a very great depth of phonological ambiguity (though each syllable may have a lesser depth of ambiguity).

Frequency, then, is the number of times that an ambiguity is found. The frequency of an ambiguity may be quite high, and may vary between studies of lexicon and text. Depth is the number of possible values that an orthographic symbol (or combination of symbols) may have. The depth of an ambiguity will usually be a low number. The frequency of an ambiguity will almost certainly be a much larger number than the depth of an ambiguity.

III. Two Types of Ambiguity

Having introduced the two dimensions of ambiguity, we will now differentiate two types of ambiguity. The first, and most common type, is 'phonological ambiguity'. The second, which derives from phonological ambiguity, is 'semantic' ambiguity.

1. Phonological ambiguity

Phonological ambiguity is the result when a phonemically distinctive feature is not marked. When a phonemic feature is not marked, there will be written forms that have more than one possible pronunciation. When a written form has more than one possible pronunciation[4], this is phonological ambiguity. This does not mean that all of the potential pronunciations of a form have possible meanings, but it does mean that a reader must evaluate options and decide which possible phonological interpretation of a written form is correct. For example, in a two-tone language, when the orthography does not show tone, a written form such as *nibo* will have a depth (as defined above) of four possible phonological interpretations:

nîbó nîbò nìbó nìbò

Though only one of these may be a possible word in the language, the reader is still faced with phonological ambiguity when confronted with the form *nibo*. Because a phonemic feature of the language is not marked, the reader is forced to sort various possible interpretations and assign proper phonemic values to the ambiguous segments.

Though every example of a certain segment or sequence may be phonologically ambiguous, that does not necessarily mean that readers will always have to consider all possible phonological values for each example of the orthographic ambiguity. That is, though a form may have a depth of two or three possible values, the reader will not always consider each option. Often, one of the values of the depth of ambiguity will be much more frequent, and thus be the usual default interpretation of that segment or sequence. For example, in English, the orthographic sequence *th* can be pronounced either voiced or voiceless. A native speaker of English will generally assume that it is voiceless, since this is the more common pronunciation (functors being a class of exceptions).

As a further example, in Gumuz, the implosive velar stop is very rare (merged totally with the egressive stop in some dialects). The

current orthography does not distinguish between implosive and egressive velar stops. Though the symbol for this stop is technically ambiguous, with a depth of two (both egressive and implosive), readers will automatically assume the more common egressive interpretation, unless context forces them to reconsider this.

2. Semantic ambiguity

When a language has phonological ambiguity, it will almost inevitably also have semantic ambiguity. Semantic ambiguity is the result when more than one of the potential interpretations of a written form are possible words in the language. In the example above with *nibo*, let us assume that only one of the potential phonological interpretations of *nibo* was a possible word in the language. This represented only phonological ambiguity, because there was no other meaning possible from the written form. Now imagine that *nɨbó* means 'tree' and *nibò* means 'egg'. In this case, the phonological ambiguity has given rise to semantic ambiguity, since there are now two potential meanings for the form *nibo*. All cases of semantic ambiguity arise from phonological ambiguity (except in the cases of homographic homonyms[5]).

Not all cases of phonological ambiguity result in semantic ambiguity. However, since languages strive for efficiency and do not usually have 'extra' phonemic distinctions, the total loss of a phonemic distinction in an orthography will almost inevitably lead to some cases of semantic ambiguity. It is possible to have a high frequency of phonological ambiguity and still have a low frequency of semantic ambiguity. If the phonological ambiguity is greatly restricted (e.g. word final high tone on short vowels is not distinguished from low tone if preceded by glottal stop, or vowel nasalization is not marked orthographically on sentence initial vowels), then semantic ambiguity may not be found at all.

In addition to phonological ambiguity, when written words have plural possible meanings, we refer to this as 'semantic' ambiguity. The more possible meanings written forms may have, the greater depth of semantic ambiguity a written form has. For example, in a Mazatec language, without any tone marking, the sequence *site* would have twelve possible meanings (Pike 1948:23), an unacceptably great depth of semantic ambiguity.

Semantic ambiguity can be further subdivided into two general categories, (though there are probably many examples that will not fit

neatly into this dichotomy). We would like to speak of 'lexical' and 'grammatical' ambiguity. Generally, this relates to roots versus inflected forms.

a) Lexical ambiguity.

Lexical ambiguity means that the orthographic forms based on different roots are spelled the same. For example, if two nouns are spelled the same in an orthography, then this is lexical ambiguity. In lexical ambiguity, it is the specific lexical item that is unclear. This is not in any way limited to items which are the same part of speech. For example, in a Mixtec language, without tone marking the sequence *naa* could mean 'mother', 'I', 'losing', and 'will be lost' (Pike 1948:6,7).

It may also be that these forms are inflected, but it is not the form of the particular inflection that is unclear, but the root. As an example, in Majang, the singular forms túták̀n 'egg' and túútúú 'tree stump' differ by both vowel length and a final syllable, but in the plural, the difference is only vowel length. Therefore, an orthography that does not differentiate vowel length (or tone) will produce lexical ambiguity with the orthographic form *tutukak*, which would represent both túták̀k 'eggs' and túútúúk̀k 'tree stumps'. In these two forms, the reader will guess that the word is a plural noun, but the orthographic form alone does not make it immediately clear to the reader if the root is 'egg' or 'tree stump'. This is a case of lexical ambiguity on inflected forms, even though the singular forms would be spelled with no lexical ambiguity

b) Grammatical ambiguity

As opposed to lexical ambiguity, there is also grammatical ambiguity. Instead of two ambiguous forms from different roots, if the precise inflection of a word is ambiguous, then this is grammatical ambiguity. For example, if the inflected past tense and the future tense are ambiguous in an orthography, then this is grammatical ambiguity. For example, let us assume the following Nayi forms were to be written without showing tone: hááy on high tone means 'ear', but hàày on a low tone means 'water'. Without tone being marked, this would be an example of lexical ambiguity. Contrast this with the potential grammatical ambiguity in the following Nayi examples: ñkeonu 'my dog' and ńkeonu 'our dog' (unmarked vowels have mid tones) (Aklilu 1990:3,4). In the first pair, it is two uninflected nouns that are ambiguous resulting in *lexical*

ambiguity; in the second pair, it is two inflected nouns, resulting in *grammatical* ambiguity, since it is not clear which inflection is intended.

Grammatical ambiguity can also be illustrated from English, where the orthography has a very low frequency of semantic ambiguity. There are not many words where the same written form may have more than one meaning, and all involve grammatical changes (that is, all the examples we have found, so far). For example, the past tense of 'read' is spelled the same as some other forms (e.g. infinitive, imperative, etc.), but it is pronounced differently. Other examples involve pairs of nouns and verbs, which generally differ only by accent, such as 'permit', 'compound', 'excuse,' etc. In all these cases, the depth of semantic ambiguity is only two, since there are only two possible semantic interpretations.

If some grammatical category (case, voice, tense, person, number, negative, etc.) is marked in the language by some phonemic feature that is not unambiguously symbolized in the orthography (tone, length, nasalization, etc.) then a grammatical ambiguity results. This is potentially very serious, but the degree of frequency must also be considered. For example, if an orthography allows a potential grammatical ambiguity only between a third person plural double causative negative interrogative and first person inclusive plural pluperfect subjunctive, there would NOT be a frequent occurrence of these ambiguous orthographic forms. However, if at least one of the two (or more) ambiguous forms is frequent in the language, then the frequency of the grammatical ambiguity may become serious. If more than one semantic value of the orthographic form is frequent in text, (that is, more that one of the possible semantic interpretations of an orthographic form are commonly used) then the semantic ambiguity is more likely to be serious, especially if the ambiguity is grammatical. For example, in Majang, the near past tense suffix is *ko* and the near future tense suffix is *koo* (tone differing, but dependent on the verb class). If the orthography shows neither tone nor vowel length, this semantic ambiguity will have a high frequency since these morphemes are used frequently. Though it has a depth of only two, both values of the depth are common so neither can be automatically chosen as the default.

It is not always possible (nor necessary) to distinguish lexical from grammatical ambiguity, but it can still be a convenient concept. The difficulty of trying to maintain this dichotomy is illustrated by the following possible orthographic form from Majang: *ŋadiŋ*. In an

orthography which does not show vowel length, this would be the orthographic representation for four possible phonological values, each of which has a semantic value:

ŋadiŋ 's/he is angry'
ŋadiiŋ 'we are angry'
ŋaadiŋ 's/he believes'
ŋaadiiŋ 'we believe '

Though we could contrast the pairs of these and identify the ambiguity as being 'lexical' or 'grammatical', it is more useful to speak of this case as having a depth of 'semantic' ambiguity of four, rather than trying to categorize the ambiguity between every pair of words.

c) Depth of semantic ambiguity

The depth of semantic ambiguity is more difficult to describe precisely than the depth of phonological ambiguity. For lexical ambiguity, the depth may differ from one orthographic form to another. That is, it may be possible that one orthographic form has a depth of three lexical interpretations, but another may have a depth of only two, and another form may have no lexical ambiguity. For example, in Gimira, the orthographic form *sam*[4] (with no tone marked) can mean 'cabbage', 'to be useless', 'glow' (noun). But there are other forms for which only two meanings are possible, and others for which there is only one possible semantic interpretation.

For grammatical ambiguity, it may be possible to describe the depth of ambiguity more precisely. For example, "under the proposed orthography, all genitive case nouns are ambiguous as to singular or plural number", giving a semantic ambiguity depth of two. It will sometimes be the case that such descriptions of ambiguity can be stated with phonological conditions, e.g. "all vowel-final noun roots, when marked for genitive case, are ambiguous as to singular or plural number", or "all verbs of tone Class Two are ambiguous between active and passive forms". For example, in Trique, without tone marks on the first syllable, there would be ambiguity as to tense on "all verbs ... whenever all syllables do not lower to [tone] four or five" (Longacre 1979:47). Or, in Amharic, all verbs of Group II are ambiguous as to active or passive when based on the contingent stem.

Though the depth of semantic ambiguity may be small, semantic ambiguity may still have a high frequency. That is, even if there are not many written forms that have semantic ambiguity, if these are

common in written form, then the frequency of the semantic ambiguity may force the adoption of some way to disambiguate such forms.

In cases where the depth and frequency of semantic ambiguity is low, the feature is often not generally marked in an orthography. When an orthographic form with semantic ambiguity is frequent, and both (all) values of the depth of ambiguity could easily be found in the same context, it may be necessary to create some way to orthographically disambiguate these forms. For example, in the Gimira language of southwest Ethiopia, those who prepared an orthography decided not to mark most words for tone, relying on context to disambiguate such sets as *sam*^{6} 'cabbage', *sam*^{3} 'to be useless', *sam*^{1} 'glow' (noun). However, the third person singular pronouns for masculine and feminine differ only by tone, so these two words are orthographically marked to show the difference (Mary Breeze, personal conversation).

3. Problems arising from phonological and semantic ambiguity

Traditionally, frequency of semantic ambiguity is the measurement of ambiguity that has usually been discussed. As long as an orthography did not create too many semantically ambiguous forms, the orthography was generally felt to have a low degree of ambiguity and to be adequate. Where genuine semantic ambiguity did exist, it was hoped that context and collocations would solve the ambiguity. For example, if a verb and derived noun in a given language both had the same orthographic form, it was hoped that the position in the sentence would disambiguate the two forms. The phonological ambiguity faced by readers has not usually been considered as long as it did not result in a high frequency of semantic ambiguity.

Phonological ambiguity leads to semantic ambiguity when minimal pairs (triplets, etc.) arise from an orthography. This is what is traditionally and usually meant by 'ambiguity'. Conversely, if no minimal pairs were discovered, an orthography was assumed not to have any ambiguity. Following the terminology and concepts presented in this paper, such an orthography would be presumed to have no semantic ambiguity, but would still have phonological ambiguity. (However, it is doubtful that there would be absolutely no pairs with any semantic ambiguity. Who can be sure that they have thought of all possible orthographic minimal pairs in a language?)

But it is important to consider that even if there is little or no semantic ambiguity, there still may be phonological ambiguity. Phonological ambiguity can contribute significantly to difficulty in reading, especially for new readers. When readers must frequently consider potential options of what sounds/meanings are represented by written forms, they must perform many mental tasks, sorting out possible interpretations and choosing the best ones. The reader is forced to constantly choose between different options, leading to backtracking, a slow reading speed and to fatigue.

The 'depth' and 'frequency' of semantic ambiguity may be small, but the 'frequency' of phonological ambiguity can still be great.

For example, let us imagine a two-tone language. If all combinations of tones are possible, then a trisyllabic word would have eight possible pronunciations:

mópísú	mópísù	mòpísù	mòpísú
mópìsù	mòpìsù	mòpìsú	mópìsú

In this hypothetical example, though there may be little or no semantic ambiguity, there is a high frequency of phonological ambiguity, every vowel. The depth of the phonological ambiguity is limited to a choice of only two tones, but it is very frequent, every vowel being ambiguous. Therefore, though the depth of phonological ambiguity may be small, the frequency of phonological ambiguity must also be considered in orthography preparation and evaluation. New readers, especially, who read by syllables at first would have difficulty.

There have been a number of 'successful' orthographies which have had a fairly high frequency of phonological ambiguity. However, that does not mean that that frequency of phonological ambiguity can be ignored. A high frequency of phonological ambiguity may well be a significant factor in many less successful orthographies. Also, these successful orthographies might have been even more successful if they had had less ambiguity. (The question of measuring the success of an orthography is another matter!!)

For example, the Oromo orthography has been in use for about one hundred years, mostly in Christian churches. Though it is widely used, and many people can read it fluently, some find the orthography difficult. The main problem is phonological ambiguity. The Oromo orthography, using the Ethiopic syllabary, does not show two phonemic features: consonant gemination and vowel length (on three

of the vowels)[6]. Using our terminology, the Oromo orthography has a high frequency of phonological ambiguity. The above features of vowel length and consonant gemination have a depth of two each. There is a high degree of phonological ambiguity and consequently, there are some cases of semantic ambiguity, as well.

This is illustrated below with an example written in the Oromo orthography based on the Ethiopic script[7].

orthography	gloss:	potential pronunciations:
ኽርኽሩ	'to tremble'	keerkeruu, kerkeruu, keerrrikeruu keerrikeruu, keerrikeruu, keerkeeruu, kerkeru, kerkeru, kerkerruu, keerirkerru, keerrikeerruu, etc.

Of the more than thirty possible pronunciations, only one is an actual word, *kerkeruu*. However, the reader is still faced with a high number of possible alternatives regarding the pronunciation of this orthographic form. While there is no semantic ambiguity in this example, the phonological ambiguity is high.

With amazing frequency, we find references in the literature to marking tone, or some other 'exotic' phoneme, 'only on minimal pairs'. Aside from the fact that we wonder if the analyst is aware of all possible minimal pairs, this practice still creates a high frequency of phonological ambiguity, even if it does not create a high frequency of semantic ambiguity. Even "if there are no minimal pairs, and yet the language is tonal, tone is a redundancy feature and still might need to be written for easy reading." (Wiesemann 1989:15).

The 'amount' of ambiguity in an orthography is not just the frequency of semantic ambiguity. The total amount of ambiguity includes the depth and the frequency of ambiguity, both phonological and semantic.

The presence of some phonological ambiguity in any orthography is likely; with some scripts, it is inevitable. As those who plan orthographies are forced to leave certain phonemic features unmarked, a certain degree of ambiguity is inevitable. With each additional phonemic feature that is unmarked, the phonological ambiguity increases, and therefore the likelihood of semantic ambiguity also increases. By considering the concepts of 'depth' and 'frequency' of both 'semantic' and 'phonological' ambiguity, it should

be possible to make these decisions in a more informed, more thoughtful way.

IV. Quantifying Ambiguity

It might be appealing (to some) to devise a way to mathematically quantify ambiguity in orthographies. Then a certain standard could be established, e.g. any orthography that has a score above X is too ambiguous and must be improved. It would then be a mathematically straightforward task to take a piece of text, prepare it in the various proposed orthographic forms, then to calculate all of the various ambiguities and total them up. Gordon tells of an experiment where such procedures were actually tried, but some parts of the test ended up being 'arbitrary' and some calculations became 'prohibitively difficult' (1986:76).

We do not think such a procedure is possible or useful. Such a measurement would appear to give the precise mathematical measurement of ambiguity in an orthography, giving the illusion of precision. This could not give a true measurement of the real ambiguity for *a native speaker* reading the text. Especially for fluent readers, many potential ambiguities (especially phonological ambiguities) will not even be considered due to redundancies in the language and context. For example, if two nouns are written the same, but one means 'weed' and the other means 'eclipse', a text about caring for bean fields will automatically provide the context to prompt the reader to instantly choose the pronunciation for 'weed', never even considering the other option. Also, if verbs and derived nouns are differentiated only by tone, in a verb-initial language, the (fluent) reader would quite automatically choose the verbal tone pattern for the first word in a sentence, and the nominal tone pattern for a word that followed a verb. Though some things may be theoretically ambiguous to a linguist, a native speaker reading them may not sense the ambiguity.

As another example of native speaker intuition compensating for an orthographic ambiguity, let us briefly present gemination in Amharic verbs. Gemination within verbs is closely related to verb classes and inflections. For most verbs, the gemination is redundant, the affixes and root-internal vowel inflections can unambiguously differentiate the particular verb form. Therefore, a *native speaker* who is a fluent reader can usually deduce the consonant gemination quite quickly, even automatically, even when reading aloud. This suggests that the native speaker who is a fluent reader may not be greatly

hindered by a phonological ambiguity which can be resolved by other redundant features of the morphology.

For these kinds of reasons, it does not seem possible to produce a useful, accurate way to mathematically quantify ambiguity based solely on analysis of written texts.

Though we have just discussed ways in which context may help a reader to correctly interpret an ambiguous orthographic form, we believe that readers, especially new readers, will not and cannot take as many clues from context as some orthography planners may hope they will. There appears to be no substitute for the careful testing of ambiguity in orthography.

V. Seriousness of Ambiguity

Not all cases of ambiguity are equally serious. For instance, as mentioned above, in Gumuz, the implosive velar stop is very rare, in some dialects merged totally with the egressive voiced stop. Therefore, the orthography for Gumuz does not differentiate between implosive and egressive velar stops. This does theoretically create phonological ambiguity for every use of the voiced velar stop symbol, but in practical terms, the readers will normally assume the egressive phoneme and not be hampered by the possibility of the rare implosive stop. As far as we know, there are no examples of semantic ambiguity that arise from this. Therefore, this case of phonological ambiguity is of little consequence.

On the other hand, some cases of orthographic ambiguity would be catastrophic. For example, if tone were not marked in the Mazatec example given above, the frequency and depth of ambiguity, not merely phonological but semantic, would make it impossible to read it. There is a tendency to 'simplify' an orthography by not marking tone (other features as well, but most often tone) if there are not many minimal pairs[8]. "Though tone may not provide many words in a language differing by pitch alone, it may nevertheless play an important part in the language. It is a mistake to ignore the tonemes of a language just because few words depend on them entirely to distinguish meanings." (Pike 1948:6,7).

As linguists try to gauge the seriousness of orthographic ambiguity, they must be wary, for "the determination of functional load depends upon what clues the speakers of a language actually use to distinguish pairs of similar words." (Gudschinsky 1973:120). What

may appear to be a minor ambiguity (to the linguist) may in fact be a major ambiguity to the native speaker/reader, and vice versa. Though the omission of a phoneme may create few minimal pairs, this phoneme may be one that native speakers focus on to a high degree.

Grammatical ambiguity would appear to be more serious than lexical ambiguity, especially if it would appear more frequently in text and could not be resolved as easily by referring to context (see the examples above of the Majang near past and near future suffixes).

Lexical ambiguity would probably be more serious if the potential meanings of an orthographic form were the same part of speech, e.g. nouns. Presumably, if a verb and a derived noun were spelled the same, their position in a sentence would help disambiguate these homographic forms. However, new readers will not utilize the contextual clues as effectively as fluent readers.

The position in the sentence can be crucial for grammatical ambiguities. If it occurs early in the sentence, it is often more crucial; if it occurs later in the sentence, then the initial parts of the sentence may provide enough context to help the reader to disambiguate (Gudschinsky 1973:121,122). For example, if the (unmarked) tone on a sentence initial morpheme differentiated imperatives and interrogatives, then the rest of the sentence would be understood (at least in the first reading pass) according to the reader's initial interpretation of the tone on the sentence-initial morpheme.

This situation is found in Murle (a language of the Sudan-Ethiopia border), where tone has been found to carry so little functional load that it is not marked in the orthography, except on the sequence *ma*. Jon Arensen explained it to me as follows: "This word comes at the beginning of a clause and depending on tone and fortis can mean 'and', 'don't', or 'if'. The entire intonation of the following clause depends on getting the first *ma* pronounced correctly. In most situations the context helps the reader understand how to pronounce a given word, but since *ma* almost always precedes the clause, the context is of little help until the clause is read several times. Even then it can be totally misunderstood. Therefore I have chosen to write these three words with diacritics and these words are taught as separate sight words in the Murle primer." (Jon Arensen, private communication, 1990). He gives the following examples, in the Murle orthography.

Má aŋoli	'Don't be afraid!'
Mâ aŋoli	'And he fears.'
Ma aŋoli, ŋaan aviir.	'If he fears, he will run.'

VI. Summary

We have explained how we distinguish ambiguity in two dimensions, frequency and depth. Frequency refers to the number of times that a particular ambiguity occurs, whether in studies of text or lexicon. Depth is the number of values or interpretations an orthographic form may have.

We have also distinguished two types of ambiguity, phonological and semantic. Phonological ambiguity means that a reader can pronounce a written form in more than one way, regardless of whether these alternatives have any meaning in the language. Semantic ambiguity means that of the possible interpretations of the orthographic form, more than one is a meaningful word in the language.

By presenting the concept of phonological ambiguity apart from semantic ambiguity, we have tried to show that an orthography can still present frequent ambiguities to a reader, even if little or no semantic ambiguity exists. Orthography planners cannot ignore the potential seriousness of this problem, especially for new readers.

We have divided semantic ambiguity into two subtypes, lexical and grammatical, though admitting that this is not always a discrete dichotomy. Lexical ambiguity is the result when an orthographic form allows for the interpretation of different possible words from different roots. Grammatical ambiguity is the result when an orthographic form is ambiguous as to its inflection.

The chief problem of ambiguity in orthography is that it may force a reader to reread a passage or it may actually lead to incorrect understanding of a passage. "In general, an orthography that forces a person to read something more than once in order to understand it is a poor one." (Gudschinsky 1973:127)

We have also argued that it is not possible to precisely quantify the ambiguity that a native speaker will face in an orthography, especially as the person becomes a fluent reader. There is no substitute for careful testing of an orthography, but we hope that the

concepts presented here will help orthography planners to devise more useful tests.

VII. Notes

1. Simply because we work in Ethiopia, many of the examples in this paper are based on Ethiopian languages and the Ethiopian syllabary. Similar types of examples could be found around the world.

The Ethiopic script is a syllabary and has certain inherent limitations when being adapted to non-Semitic languages. Therefore, we have struggled with the problems of representing tone and vowel length in the Majang language using this script. This paper was born out of those struggles.

We were not aware of Gordon's paper (1986) as we formulated the basic concepts, but in our revising processes have tried to take advantage of some of his insights and conformed to his usage on the term 'depth' of ambiguity. His section on functional load and redundancy (pp. 75-78) is important. We have said little about redundancy, not because it is unimportant, but because we have tried to maintain a narrow focus: analyzing ambiguity.

2. Though the similarity between phonological processing and reading is debatable (see a summary of the issues by Ray Gordon, 1986), we feel that many teaching methods lead new readers into processing orthography in ways similar to processing audible speech. This is probably even more likely to happen with a syllabary (such as is used in Ethiopia), than with an alphabet.

3. The terminology may be opaque to those outside of Ethiopia; suffice to say that a large class of verbs, in the future tense and many subordinate forms, have the same orthographic form in both active and passive, though they are phonetically differentiated by the gemination of the first root consonant in the passive voice.

4. We limit ourselves to the discussion of basically word level pronunciation problems, not including such factors as emotion of the speaker, subordinate clause intonation, etc.

5. Homographic homonyms are words that are spelled and pronounced the same, but have different meanings. For example, the orthographic form *bark* in English can mean 'the shout of a dog' or 'the outside layer of a tree'. The ambiguity of the orthographic form does not derive from phonological ambiguity in the orthography, but

from a homonym, which is spelled homographically. Homonyms cannot be too numerous in any language, or communication will be impeded. Orthography planners should not feel responsible to orthographically disambiguate words which are true homonyms, except maybe in the case of those which arise by morphophonemic processes.

6. There is also evidence that Oromo should be analyzed as a two-tone language, but there is no unanimity on this point and tone is not marked in Oromo.

7. We would like to thank the staff of the Oromo Lexicography office of the Academy of Ethiopian Languages for providing this example. This in no way implies their endorsement of the rest of this paper.

8. At the 3rd Nilo-Saharan Linguistics Colloquium in 1989, such opinions were voiced very clearly by some, some arguing that it is pedagogically too difficult to teach tone marks. One linguist, a native speaker of a tone language, argued that "My father and mother can read the Bible in our language very well, even without tone marks," then added, "but I don't know how they do it."

It was very interesting to hear a native speaker of Kanuri read a paper arguing for the necessity of adding tone marks in the orthography, then to hear a European linguist (who had helped plan the present orthography) stand to publicly argue with him.

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Agreement with the Center for Applied Linguistics

In October of this year, the office of the International Literacy Coordinator and the National Clearinghouse for Literacy Education (NCLE) of the Center for Applied Linguistics agreed to enter into a 'partnership' relationship. This is a rather informal relationship in which the two entities involved agree to share information and documents of interest to each other. As a clearinghouse, the NCLE is especially interested in continuing to build its database of literacy materials from around the world.

The NCLE is also interested in establishing partnership agreements with any of our field entities who are interested in such. The primary commitment on the part of field entities is that of sending copies of materials produced to NCLE for inclusion in their database. In turn, NCLE will produce, on request, a database search for existing materials on any topic, language, author, country, etc. of interest to the enquiring partner.

Because NCLE is also a part of ERIC, any materials submitted to NCLE are ultimately available as a part of the ERIC database.

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IMPROVING THE ROUTE TO LITERACY ?

Fred Eade

Fred Eade is a literacy researcher who has been with WEC International for eleven years. He is based in the U.K. and his research programme, which is supervised by Reading University, is geared towards visually customizing literacy materials for particular audiences, using DTP where appropriate. He is working amongst the Lobi, Birifor and Gan people in Burkina Faso and Ghana. He is married to Jan and they have a daughter, Caroline.

The year 1990 marked the biggest focus on international literacy with its problems and potential that maybe the world has ever seen. UNESCO declared 1990 as International Literacy Year, and literacy workers the world over were invited to share their experiences and learn from one another. Agencies and governments had their attention drawn to the enormous task still to complete, and few escaped the moral challenge of rising illiteracy in these days.

Undoubtedly some benefits will result, and yet the actual job itself – of helping people to discover themselves, and the world, through reading – is grounded in a reality quite different from the atmosphere of international promotion. It often involves small groups of poor, sometimes marginalized, people making valiant attempts to turn the magic key of reading that will open the door to a much better life.

Turning that key and going through that door, however, involves a culture shock all of its own and the change that is expected of those that are learning to read must not be underestimated. To be able to read demands the acquisition of a whole range of skills which few, if any, preliterates possess, but which they must learn if they are to master the difficulties before them.

It is worth recognizing that many of the literacy facilitators[1] at present engaged in literacy work concentrate on the linguistic content of the materials they produce but, understandably, pay scant attention to the unique 'graphical transition' that the participants have to make. That is not to criticize literacy workers per se, or to throw doubts on their competence, but the serious education of such people in linguistics without a similar level of instruction in information design is patently incomplete. Technology is moving too far and too fast for there not to be mandatory teaching on the *graphic* components of

literacy materials as well as the *linguistic* components – for experienced facilitators as well as new workers.

Clearly the linguistic content of instructional reading materials must be accurate, but there must be dialogue between someone doing the job of 1) a designer, who can transform the linguistic core of a proposed document into something understandable, that corresponds to the visual culture of the aspiring readers, and 2) a linguist, in order for both to be of the greatest benefit to the participants in a literacy program. However, a set of customized 'style sheets' as suggested by Dave Landin in Notes on Computing 8.6.4 & 5 is not necessarily the answer. There are great differences between the visual cultures of different peoples. In fact, one could go so far as to suggest that an 'on the spot facilitator' stands more chance of getting it right than an 'off the spot designer'!

It is essential that for each discrete group of participants a thorough analysis should be made of the extant, indigenous visual conventions[2] of those wanting to read. The resultant information should be of such value that the task of both the facilitators and participants will be much easier. It will also lead to greater harmony in the operation of the literacy program as both the content and the design can have their basic source in the lives and culture of the participants and not necessarily in that of the facilitator or designer. To help establish this closer link between the linguist and the designer the following model may be helpful.

This aspect of learning to read could be said to be dependent on three discrete variables: distance, speed and direction, and this concept of travel is probably a useful analogy with which to compare these ideas; being able to read is therefore the 'final destination.'

Distance

Some preliterate groups may possess a whole range of indigenous visual conventions that are not far removed from those that they require in order to learn to read their vernacular, or trade, language. Such groups would not have 'far' to travel in order to begin to acquire literacy skills. Another group may possess a set of conventions that are virtually unrelated and 'distant' to those that they require in order to read and such a group would have 'further' to move in adapting their existing conventions.

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Speed

Unlike distance, which is an antecedent variable to the process of learning to read, speed can be imposed by the facilitator, controlled to a certain extent by the participants, and increased considerably by the work of an information designer. The rate of progress, however, should be considered carefully in balance with the distance that the participants will have to move in their thinking. It will also be affected by a range of extraneous variables, such as the permanent oral/visual environment in which the group lives, transitory visual influences to which the group is exposed, the degree of latent or active initiative that the group possesses, etc.

Direction

If the analogy of travel is accepted, and 'being literate' is seen as the destination, then the direction that any one group will take in their becoming literate will completely depend on their original position in relation to the final goal. Obviously some 'routes' that different groups take will be closer to one another than others which could be diametrically opposed. It could reasonably be expected that as one group discovers literacy, this would produce lessons that would be of value to another group that has some degree of proximity.

This model focuses our attention on both the role of the linguist and the designer. The linguist, who would most probably also be the facilitator, would have to plot the original position of the preliterate group, and, therefore, the direction of travel. The extant position of the group would decide its starting distance from the destination, and the designer would be able, with the information gathered on the indigenous visual conventions, to dramatically influence the speed of progress. Without the linguist/facilitator there could never be a literacy programme. Designers, whilst unable to enjoy the same level of indispensability, are still crucial if the needs of a preliterate group are to be met effectively, with a minimum of trauma for the participants as well as making the best use of the resources available.

If you have discovered any examples of visual conventions, please send details to the address below.

[1]Literacy facilitators. The terms 'teacher' and 'pupil' carry a paternalistic stigma which is not helpful in this context. They imply an active/passive relationship which is most inappropriate in literacy work.

[2]Indigenous visual conventions. A major study within the Burkina Literacy Project is currently concerned with attempting to identify these conventions for the Lobi people.

The principles of this investigation, as well as the detailed practice, will be readily available soon on request.

Contact:

MAIL - Fred Eade, Burkina Literacy Project,
10 Woodhill Court, Fulmer Road,
Gerrards Cross, Bucks SL9 7DZ, England, U.K.
PHONE - 0753 882038 (Home)
FAX - 0753 882470 (please mark 'attn of Fred Eade')

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THE SHELL PROJECT

In the October 1989 issue of *Read* (Vol 24, No. 2)[1] eighteen pages, contributed by Mike Trainum and David Snyder, are devoted to the Shell Project. Those pages present a method for making books that are low in cost, easy to produce, and adaptable across a broad range of language groups. The following are some excerpts from The Shell Project article.

I. History (from p. 31)

"In April of this year [1989], I [Mike Trainum] began to research the process by which vernacular literature was produced among the many language groups of Papua New Guinea. The bulk of the material researched was from the Literacy Department Archives of S.I.L.'s Linguistic Center at Ukarumpa. I also studied various publications by the government, churches and development agencies.

"This preliminary research resulted in several conclusions:

- The vernacular libraries of most language groups consist of fewer than fifty titles.
- There are many similarities in the types of materials that have been popular among the different language groups.
- There is an identifiable national literary style evident in community school curricula, newspapers, and publications by the government, various church groups and development agencies.
- Almost all publications are subsidized to some degree because of the discrepancy between their production cost and the amount people are willing or able to pay to purchase them.

"In addition, some checking on *state of the art* techniques for inexpensive, village level printing led to an important discovery: many sophisticated techniques developed for computer assisted *desktop publishing* can be adapted for use by hand in a village environment."

"In May, a number of linguists, literacy specialists and other technical support personnel in the Papua New Guinea Branch of S.I.L. began working to develop a **Shell Literature Project.**"

II. The Shell Project

"A book *shell*, as defined in the Shell Project, is a book that is completely ready to be duplicated except for the text. The pictures

and illustrations are in place, the margins are set, and the pages are laid out in the proper order and numbered. Once the text is translated and added, the shell book can be made into a stencil and printed on a *Gestetner* duplicator or silkscreen." (p. 31)

"It is easy to make high-quality books at a Writers Workshop using the shell book method. Many shells are only a sequence of pictures which have no text, which can stimulate writers' creative abilities. With this type of shell, the participants in the workshop discuss the pictures and then write stories about them.

"The same shells can be used to produce several different books. For example, the *Numanggang Reader Series* could be used to make one set of books that have a picture and a word or phrase. Another set of books could have the same picture and a whole sentence. Finally, a third set of books could have the same pictures with a short story running through the book." (p. 33)

"Shell books allow language communities to easily adapt for their own use a book that someone else has created. Once someone does the hard work of creating a shell, other languages can benefit from that shell with a minimum expenditure of time and money. By pooling resources, it should be possible to provide a large library of shells for making books on many topics. The shells from a Shell Library would be available to any language group which has an interest in translating and producing them." (pp. 33-34)

The following advice is also given, p. 32:

"Shells cannot, however, be used to generate an 'instant' literacy program where there has been no previous written language development. A working alphabet and a basic program for teaching reading and writing are minimum requirements before shell books can be of much help.

"Shells are not well-suited for the primer and beginning reading level. At this stage, the best materials are so language specific that they must be generated from within the culture of the community itself. Shells are also not the tool of choice for higher level literature, which is mostly text with few pictures.

"Shells are ideally suited for the intermediate stage of a literacy program where simple translated materials are introduced. These include such topics as procedural or instruction books in non-traditional skills; national/regional history, culture and geography;

health, agriculture, business and trade topics; religious books and anything else that people would have an interest in reading." (p. 32)

Details for designing and making shell books are given in the article, including how to do artwork for stencil printing.[2]

[1]For correspondence and subscriptions:

The Editor, Read Magazine,
Box 233, Ukarumpa via Lae
Papua New Guinea.

[2]To order a catalog or Shell Introductory Packet, write to:

The SHELL Project
Summer Institute Of Linguistics
P.O. Box 398
Ukarumpa via Lae
Papua New Guinea

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Notes On Literacy

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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

International Academic Bookstore

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
U.S.A.

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[With this issue we are initiating a different numbering system. Instead of No. 66, this issue is Vol. 17.2 ... 1991. The preceding issue, No. 65, would have been Vol. 17.1 ... 1991.]

The following is the text of one of the two documents adopted by the World Conference on Education for All (Jomtien, Thailand, 5-9 March 1990) convened jointly by the executive heads of the United Nations Children's Fund (UNICEF), United Nations Development Programme (UNDP), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Bank. The Conference was co-sponsored by an additional 18 governments and organizations, and was hosted by the Royal Government of Thailand.

WORLD DECLARATION ON EDUCATION FOR ALL

Meeting basic learning needs

PREAMBLE

More than 40 years ago, the nations of the world, speaking through the Universal Declaration of Human Rights, asserted that "everyone has a right to education". Despite notable efforts by countries around the globe to ensure the right to education for all, the following realities persist:

More than 100 million children, including at least 60 million girls, have no access to primary schooling;

More than 960 million adults, two-thirds of whom are women, are illiterate, and functional illiteracy is a significant problem in all countries, industrialized and developing;

More than one-third of the world's adults have no access to the printed knowledge, new skills and technologies that could improve the quality of their lives and help them shape, and adapt to, social and cultural change; and

More than 100 million children and countless adults fail to complete basic education programmes; millions more satisfy the attendance requirements but do not acquire essential knowledge and skills;

At the same time, the world faces daunting problems, notably: mounting debt burdens, the threat of economic stagnation and

decline, rapid population growth, widening economic disparities among and within nations, war, occupation, civil strife, violent crime, the preventable deaths of millions of children and widespread environmental degradation. These problems constrain efforts to meet basic learning needs, while the lack of basic education among a significant proportion of the population prevents societies from addressing such problems with strength and purpose.

These problems have led to major setbacks in basic education in the 1980s in many of the least developed countries. In some other countries, economic growth has been available to finance education expansion, but even so, many millions remain in poverty and unschooled or illiterate. In certain industrialized countries, too, cutbacks in government expenditure over the 1980s have led to the deterioration of education.

Yet the world is also at the threshold of a new century, with all its promise and possibilities. Today, there is genuine progress toward peaceful detente and greater cooperation among nations. Today, the essential rights and capacities of women are being realized. Today, there are many useful scientific and cultural developments. Today, the sheer quantity of information available in the world -- much of it relevant to survival and basic well-being -- is exponentially greater than that available only a few years ago, and the rate of its growth is accelerating. This includes information about obtaining more life-enhancing knowledge -- or learning how to learn. A synergistic effect occurs when important information is coupled with another modern advance -- our new capacity to communicate.

These new forces, when combined with the cumulative experience of reform, innovation, research and the remarkable educational progress of many countries, make the goal of basic education for all -- for the first time in history -- an attainable goal.

Therefore, we participants in the World Conference on Education for All, assembled in Jomtien, Thailand, from 5 to 9 March, 1990:

> *Recalling* that education is a fundamental right for all people, women and men, of all ages throughout our world;
>
> *Understanding* that education can help ensure a safer, healthier, more prosperous and environmentally sound world, while simultaneously contributing to social, economic, and cultural progress, tolerance, and international cooperation;

Knowing that education is an indispensable key to, though not a sufficient condition for, personal and social improvement;

Recognizing that traditional knowledge and indigenous cultural heritage have a value and validity in their own right and a capacity to both define and promote development;

Acknowledging that, overall, the current provision of education is seriously deficient and that it must be made more relevant and qualitatively improved, and made universally available;

Recognizing that sound basic education is fundamental to the strengthening of higher levels of education and of scientific and technological literacy and capacity and thus to self-reliant development; and

Recognizing the necessity to give to present and coming generations an expanded vision of, and a renewed commitment to, basic education to address the scale and complexity of the challenge

proclaim the following

World Declaration on Education for All:
Meeting Basic Learning Needs.

EDUCATION FOR ALL: THE PURPOSE

ARTICLE I. MEETING BASIC LEARNING NEEDS

1. Every person -- child, youth and adult -- shall be able to benefit from educational opportunities designed to meet their basic learning needs. These needs comprise both essential learning tools (such as literacy, oral expression, numeracy, and problem solving) and the basic learning content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning. The scope of basic learning needs and how they should be met varies with individual countries and cultures, and inevitably, changes with the passage of time.

2. The satisfaction of these needs empowers individuals in any society and confers upon them a responsibility to respect and build upon their collective cultural, linguistic and spiritual heritage, to promote the education of others, to further the cause of social justice, to achieve environmental protection, to be tolerant towards social, political and religious systems which differ from their own, ensuring that commonly accepted humanistic values and human rights are upheld, and to work for international peace and solidarity in an inter-dependent world.

3. Another and no less fundamental aim of educational development is the transmission and enrichment of common cultural and moral values. It is in these values that the individual and society find their identity and worth.

4. Basic education is more than an end in itself. It is the foundation for lifelong learning and human development on which countries may build, systematically, further levels and types of education and training.

EDUCATION FOR ALL: AN EXPANDED VISION AND A RENEWED COMMITMENT

ARTICLE 2. SHAPING THE VISION

1. To serve the basic learning needs of all requires more than a recommitment to basic education as it now exists. What is needed is an "expanded vision" that surpasses present resource levels, institutional structures, curricula, and conventional delivery systems while building on the best in current practices. New possibilities exist today which result from the convergence of the increase in information and the unprecedented capacity to communicate. We must seize them with creativity and a determination for increased effectiveness.

2. As elaborated in Articles 3-7, the expanded vision encompasses:

Universalizing access and promoting equity;

Focussing on learning;

Broadening the means and scope of basic education;

Enhancing the environment for learning;

Strengthening partnerships.

3. The realization of an enormous potential for human progress and empowerment is contingent upon whether people can be enabled to acquire the education and the start needed to tap into the ever-expanding pool of relevant knowledge and the new means for sharing this knowledge.

ARTICLE 3. UNIVERSALIZING ACCESS AND PROMOTING EQUITY

1. **Basic education should be provided to all children, youth and adults.** To this end, basic education services of quality should be expanded, and consistent measures must be taken to reduce disparities.

2. For basic education to be equitable, all children, youth and adults must be given the opportunity to achieve and maintain an acceptable level of learning.

3. The most urgent priority is to ensure access to, and improve the quality of, education for girls and women, and to remove every obstacle that hampers their active participation. All gender stereotyping in education should be eliminated.

4. An active commitment must be made to removing educational disparities. Underserved groups -- the poor; street and working children; rural and remote populations; nomads and migrant workers; indigenous peoples; ethnic, racial, and linguistic minorities; refugees; those displaced by war; and people under occupation -- should not suffer any discrimination in access to learning opportunities.

5. The learning needs of the disabled demand special attention. Steps need to be taken to provide equal access to education to every category of disabled persons as an integral part of the education system.

ARTICLE 4. FOCUSSING ON LEARNING ACQUISITION

Whether or not expanded educational opportunities will translate into meaningful development -- for an individual or for society -- depends ultimately on whether people actually learn as a result of those opportunities, i.e., whether they incorporate useful knowledge, reasoning ability, skills, and values. The focus of basic education must, therefore, be on actual learning acquisition and

outcome, rather than exclusively upon enrollment, continued participation in organized programmes and completion of certification requirements. Active and participatory approaches are particularly valuable in assuring learning acquisition and allowing learners to reach their fullest potential. It is, therefore, necessary to define acceptable levels of learning acquisition for educational programmes and to improve and apply systems of assessing learning achievement.

ARTICLE 5. BROADENING THE MEANS AND SCOPE OF BASIC EDUCATION

The diversity, complexity, and changing nature of basic learning needs of children, youth and adults necessitates broadening and constantly redefining the scope of basic education to include the following components:

Learning begins at birth. This calls for early childhood care and initial education. These can be provided through arrangements involving families, communities, or institutional programmes, as appropriate.

The main delivery system for the basic education of children outside the family is primary schooling. Primary education must be universal, ensure that the basic learning needs of all children are satisfied, and take into account the culture, needs, and opportunities of the community. Supplementary alternative programmes can help meet the basic learning needs of children with limited or no access to formal schooling, provided that they share the same standards of learning applied to schools, and are adequately supported.

The basic learning needs of youth and adults are diverse and should be met through a variety of delivery systems. Literacy programmes are indispensable because literacy is a necessary skill in itself and the foundation of other life skills. Literacy in the mother-tongue strengthens cultural identity and heritage. Other needs can be served by: skills training, apprenticeships, and formal and non-formal education programmes in health, nutrition, population, agricultural techniques, the environment, science, technology, family life, including fertility awareness, and other societal issues.

All available instruments and channels of information, communications, and social action could be used to help convey essential knowledge and inform and educate people on social issues. In addition to the traditional means, libraries, television, radio and other media can be mobilized to realize their potential towards meeting basic education needs of all.

These components should constitute an integrated system -- complementary, mutually reinforcing, and of comparable standards, and they should contribute to creating and developing possibilities for lifelong learning.

ARTICLE 6. ENHANCING THE ENVIRONMENT FOR LEARNING

Learning does not take place in isolation. Societies, therefore, must ensure that all learners receive the nutrition, health care, and general physical and emotional support they need in order to participate actively in and benefit from their education. Knowledge and skills that will enhance the learning environment of children should be integrated into community learning programmes for adults. The education of children and their parents or other caretakers is mutually supportive and this interaction should be used to create, for all, a learning environment of vibrancy and warmth.

ARTICLE 7. STRENGTHENING PARTNERSHIPS

National, regional, and local educational authorities have a unique obligation to provide basic education for all, but they cannot be expected to supply every human, financial or organizational requirement for this task. New and revitalized partnerships at all levels will be necessary: partnerships among all sub-sectors and forms of education, recognizing the special role of teachers and that of administrators and other educational personnel; partnerships between education and other government departments, including planning, finance, labour, communications, and other social sectors; partnerships between government and non-governmental organizations, the private sector, local communities, religious groups, and families. The recognition of the vital role of both families and teachers is particularly important. In this context, the terms and conditions of service of teachers and their status, which constitute a determining factor in the implementation of education for all, must be urgently improved in all countries in line with the joint ILO/UNESCO Recommendation Concerning the Status of Teachers (1966). Genuine partnerships contribute to the planning, implementing, managing and

evaluating of basic education programmes. When we speak of "an expanded vision and a renewed commitment", partnerships are at the heart of it.

EDUCATION FOR ALL: THE REQUIREMENTS

ARTICLE 8. DEVELOPING A SUPPORTING POLICY CONTEXT

1. **Supportive policies in the social, cultural, and economic sectors are required in order to realize the full provision and utilization of basic education for individual and societal improvement.** The provision of basic education for all depends on political commitment and political will backed by appropriate fiscal measures and reinforced by educational policy reforms and institutional strengthening. Suitable economic, trade, labour, employment and health policies will enhance learners' incentives and contributions to societal development.

2. Societies should also insure a strong intellectual and scientific environment for basic education. This implies improving higher education and developing scientific research. Close contact with contemporary technological and scientific knowledge should be possible at every level of education.

ARTICLE 9. MOBILIZING RESOURCES

1. **If the basic learning needs of all are to be met through a much broader scope of action than in the past, it will be essential to mobilize existing and new financial and human resources, public, private and voluntary.** All of society has a contribution to make, recognizing that time, energy and funding directed to basic education are perhaps the most profound investment in people and in the future of a country which can be made.

2. Enlarged public-sector support means drawing on the resources of all the government agencies responsible for human development, through increased absolute and proportional allocations to basic education services with the clear recognition of competing claims on national resources of which education is an important one, but not the only one. Serious attention to improving the efficiency of existing educational resources and programmes will not only produce more, it can also be expected to attract new resources. The urgent task of meeting basic learning needs may require a reallocation between sectors, as, for example, a transfer from military to educational expenditure. Above all, special protection for basic

education will be required in countries undergoing structural adjustment and facing severe external debt burdens. Today, more than ever, education must be seen as a fundamental dimension of any social, cultural, and economic design.

ARTICLE 10. STRENGTHENING INTERNAL SOLIDARITY

1. **Meeting basic learning needs constitutes a common and universal human responsibility. It requires international solidarity and equitable and fair economic relations in order to redress existing economic disparities.** All nations have valuable knowledge and experiences to share for designing effective educational policies and programmes.

2. Substantial and long-term increases in resources for basic education will be needed. The world community, including intergovernmental agencies and institutions, has an urgent responsibility to alleviate the constraints that prevent some countries from achieving the goal of education for all. It will mean the adoption of measures that augment the national budgets of the poorest countries or serve to relieve heavy debt burdens. Creditors and debtors must seek innovative and equitable formulae to resolve these burdens, since the capacity of many developing countries to respond effectively to education and other basic needs will be greatly helped by finding solutions to the debt problem.

3. Basic learning needs of adults and children must be addressed wherever they exist. Least developed and low-income countries have special needs which require priority in international support for basic education in the 1990s.

4. All nations must also work together to resolve conflicts and strife, to end military occupations, and to settle displaced populations, or to facilitate their return to their countries of origin, and ensure that their basic learning needs are met. Only a stable and peaceful environment can create the conditions in which every human being, child and adult alike, may benefit from the goals of this Declaration.

* * *

We, the participants in the World Conference on Education for All, reaffirm the right of all people to education. This is the foundation of our determination, singly and together, to ensure education for all.

We commit ourselves to act cooperatively through our own spheres of responsibility, taking all necessary steps to achieve the goals of education for all. Together we call on governments, concerned organizations and individuals to join in this urgent undertaking.

The basic learning needs of all can and must be met. There can be no more meaningful way to begin the International Literacy Year, to move forward the goals of the United Nations Decade of Disabled Persons (1983-92), the World Decade for Cultural Development (1988-97), the Fourth United Nations Development Decade (1991-2000), of the Convention on the Elimination of Discrimination against Women and the Forward Looking Strategies for the Advancement of Women, and of the Convention on the Rights of the Child. There has never been a more propitious time to commit ourselves to providing basic learning opportunities for all the people of the world.

We adopt, therefore, this *World Declaration on Education for All: Meeting Basic Learning Needs* and agree on the *Framework for Action to Meet Basic Learning Needs*, to achieve the goals set forth in this *Declaration*.

PROMOTING VERNACULAR LITERATURE

Jean Dawson

Jean joined SIL and WBT in 1954. She worked as a translator for the Ilianen Manobo in the Philippines until 1976. At the same time she served as Head of the Literacy Department of the Philippine Branch and International Literacy Consultant assigned to Asia Area. She now works with her husband on loan from the Indonesia Branch to the Thailand Working Group.

I. Introduction
II. Appropriate Domains for Vernacular Literature
III. Reading Level of the Target Community
    1. Scale of Reading Ability
    2. Management of Texts for Readability
IV. Conceptual Level of the Readers

I. Introduction

One of the least defined tasks of a linguistics/translation team is 'promoting the use of vernacular literature'. The need for effective guidelines touches most of our teams. In the Indonesia Branch, for example, perhaps two-thirds of the language teams will never need to make primers, but they face the extremely complicated task of getting a bilingual population to begin to use literature in the vernacular. Our literacy departments are excellent in providing helps for making instructional materials. We need to turn this same excellence toward guidelines for establishing vernacular literature.

II. Appropriate Domains for Vernacular Literature

The most important quality a team must have in facing this task is sensitivity to the language community. In what domains of life will people want to use vernacular literature on an ongoing basis? Preliterate communities moving into literacy will naturally use the vernacular in all domains as soon as they can read. But literate or bilingual communities already have a pattern of language use. Bahasa Indonesia is used for certain purposes, for example, for formal education, for marketing, for formal church services. The 'bahasa daerah' might be used for other domains such as folk literature, traditional 'adat' laws, folk medicine, exhorting children concerning the culture's do's and don'ts. The pattern will be different for each community, so a researcher must ask a lot of questions and observe

just what the pattern is, then he must try to figure out what will likely emerge as a pattern for using the 'bahasa daerah' in print.

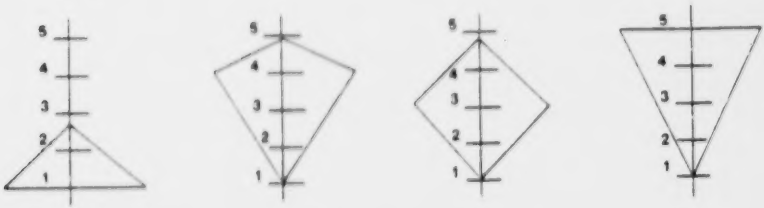
The first question, then, is literature for what domains of life and in what form? Another question concerns reading abilities of the community.

III. Reading Level

1. Kathy Bosscher, in an unpublished manuscript of notes for literacy consultants, describes reading levels using the following scale:

	READER	
5	speech speed with comprehension	LITERATE
4	slow with comprehension	
3	syllable word caller	SEMILITERATE
2	ready-to-read	
1	pre-readiness	ILLITERATE
	NONREADER	

She suggests that a team do a profile of the readers in their language community. The profile might look like one of the following:



Questions: 1. At what reading level are most people?

2. At what level should the material be presented? Why?

3. To what level should the material reach? Why?

With a profile in mind it is easier to plan exactly what type of literature to get into print. Make a plan. There may be reason for

aiming mostly at the majority of readers, with a few pieces for the slower readers and a few for the top. Have reasons for what you do.

2. Management of texts for readability

Having made a decision about what reading level to aim for, how does a person adjust a booklet for a lower or higher level? Bosscher mentions the following ways of managing of texts for readability.

Predictability of the text determines readability. Some common techniques to increase the predictability of a text are:

a. – use of picture cues,

b. – limiting the number of new items in a text; for example, in primers, limiting the letters or words,

c. – use of consistent format,

d. – use of language cues,

- – phonics cues (alliteration, rhyme),
- – grammatical cues (sentence frames: substitution, expansion, transformations, discourse patterns),

e. – use of repetition.

Caution: The use of any technique can increase predictability (readability). The **overuse** of any technique can interfere with the natural predictability of clear, idiomatic language and thus lower the predictability (readability). So, always check with your neighbors in the village to make sure the text is 'idiomatic' on a discourse level as well as lower levels.

Bosscher illustrates the concept of readability based on predictability in English by comparing two paragraphs. If one were to black out every fifth word in each paragraph and test them with readers of English, one would find that the first is so predictable that the missing words will be easily guessable. In the less predictable text, the missing words will be more difficult to guess.

> Easy to read: Once upon a time, *there* were three bears; a *mama* bear, a papa bear and *a* wee little baby bear. *One* day mama bear made *some* porridge, but it was *too* hot. So the bear *family* went out for a *walk* in the forest.

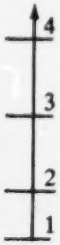
> Harder to read: Without being reminded of *the* sanctions of law for *nonvoting*, millions of voters jammed *yesterday's* voting centers in the *country's* first barangay elections held *in* 10 years, the Commission *on*

Elections reported. Chairman Vicente *Santiago* said turnout was exceptionally *heavy* in almost all areas.

IV. The Conceptual Level of the Readers

The second dimension Bosscher describes is the conceptual level of the readers. This does not refer to intelligence but to the kind of understanding people have in relationship to given concepts or data:

Scale: **Understanding**



4 understands scientific/logical explanation outside experience,

3 knows what can be done and can change behavior in order to alter the cause-effect relationship,

2 is aware of cause-effect relationships,

1 makes systematic observations of environment.

(Scale adapted from Bosscher)

Questions: 1. At what level of dealing with concepts are most people?

2. At what level should the material be presented? Why?

3. To what level should the material reach? Why?

Bosscher illustrates how a simple text on diarrhea could vary depending on the conceptual level of the reader:

1. **Systematic observation/raising the question.**

Diarrhea is a common sickness.

It is very common in Pusil.

On the other hand, people of Limos seldom get it.

2. **Cause and effect relationship**

The source of water in Limos is the spring.

In Pusil, people drink river water.

This is the reason that Pusil people easily get diarrhea.

3. **Altering the cause-effect relationship**

   It is possible to clean our drinking water.

   Boiling water purifies it.

   The water must be boiled for ten minutes.

4. **Explanation**

   The germs in the water are the cause of diarrhea.

   It is the boiling of water that makes the germs harmless.

   In fact, the germs are killed.

Two examples from my experience in writers' workshops illustrate the effectiveness of introducing people to new concepts starting at their level of understanding, whether Level 1, 2, 3, or 4.

The first example involves the over a dozen aborigines from different language groups who participated in a language workshop in Darwin, Australia, some time ago, and the contrast between two presentations. We had finished the first set of assignments in which the writers were asked to write things that were familiar both to themselves and their reading audience at home. The second set of assignments involved showing or telling them something new and asking them to write it in such a way that it would be understandable and vivid to the audience at home. One presentation was from a public health inspector. In relatively simple language he explained one of the health problems of many aborigine camps. People use the hills above the camp for their toilet area; this pollutes the small streams which carry the diseases to the lower area around the camp where people get their drinking water. The result is sickness. It was a Level 3 presentation. I was sitting where I could see the faces of the writers. They were completely turned off. There was no flow of understanding, appreciation or interest. At the time I could not figure out what the problem was.

A few days later we had a presentation by a public health doctor on smoking. (Smoking is a major health problem among some aborigines.) The doctor arrived, greeted the students, asked them to sit around the table and then he unpacked a wooden contraption which he said was a 'smoking machine'. He put it on the table, took out four packs of cigarettes of different brands and explained how the machine worked. He put a round, white filter disk at a certain place

and explained that this represented our lungs. He plugged a cigarette into the machine's 'mouth' and explained that using the hand-operated bellows he would make the machine smoke the cigarette. "If we inhale when we smoke a cigarette, the smoke will pass into our lungs," he said. He operated the bellows, causing the machine to smoke one cigarette. Then he removed the white filter and it was covered with a black residue. It was a particularly repulsive looking black residue. He laid it on the table where everyone could see it. "This represents our lungs." he said. Then he put in a clean filter and took a cigarette of a different brand and repeated the process. Again he removed the filter. It had a black residue--not quite as bad, but still very ugly. He said that this showed a slight difference between brands. He placed another filter and did a third brand, then a fourth. The four black-stained filters were lying out on the table. He said, "So you can see there is a little difference, but not much, between brands." Then he thanked the participants for their attention, packed up his machine and took his leave. Watching the faces of the writers during the demonstration I could see how deeply impressed they were. The doctor never once said, "So, don't smoke." I heard later that two of the participants had stopped smoking!!

It had been a Level 1 presentation. They made observations. Any cause-effect conclusions took place in the minds of the writers.

Another example took place in a writers' workshop at Nasuli, Mindanao. One of the least educated and isolated communities represented by the writers was the Atta Manobo. The village captain participated as a 'writer'. During the second set of assignments in which new things were introduced, the writers were given a tour through a clinic. Almost everything they saw was new: an Xray machine, an operating room, a lab with microscopes, a pharmacy. I wondered if it had been too overwhelming. The Atta Manobo village leader wrote an article that no one could have predicted. He wrote for his people that in times past until now when someone died in their place they had had to use trial by ordeal in order to find out by magic who was responsible for that death. This in turn brought punishment and retribution and revenge. "But now," he said, "there is a way we can find out what really caused that sickness and thus we will be freed from the necessity of finding out by magic." The presentation at the clinic had been a Level 1 presentation of facts to observe. If anyone had tried to inject a cause-effect statement, or a 'change of behavior' conclusion they would have missed completely the thing which was the live issue for that community. He alone

knew what conclusion they were ready for. A Level 2, 3, or 4 presentation would have failed.

This article has taken a brief look at three things to be considered in seeking to encourage the use of vernacular literature: 1. In what domains will the vernacular be accepted? 2. What reading level will meet with the greatest success? 3. What concept level should the literature aim for?

--from Bits and Pieces, the bulletin of the Indonesia Branch Technical Studies department, May 1989.

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Notice

The 16th Annual Boston University Conference on Language Development will be held on October 18, 19, and 20, 1991. The keynote speaker will be Dr. Steven Pinker of M.I.T.

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INTERNATIONAL LITERACY YEAR IN RETROSPECT

International Literacy Year has come to an end, but the challenge throughout the decade remains, to help decrease the percentage of illiteracy throughout the world.

For example, the British Division has prepared an informative letter encouraging literacy participation, also a number of interesting brochures, among them: 'Christmas stocking' (an imaginative way to send a gift to two Wycliffe literacy projects: for the Kobon people of Papua New Guinea and the Deg people of Ghana), another pamphlet about 'Literacy Weekend', another was entitled 'Wycliffe teaching the world to read Good News' and another 'Literacy workers'. The latter includes a section on 'Stages in the life of a typical literacy specialist' the points of which follow:

*Receives full training ...
*Lives among pre-literate people ...
*With help from the existing translation team learns the language and way of life ...
*Decides upon a literacy strategy in cooperation with the translation team and national leadership ...
*Sees through to production a set of experimental reading primers ...
*Tries out the primers in a class situation ...
*Inaugurates a wider reading program ...
*Includes the teaching of hand-writing and possible other forms of education as well ...
*Encourages the development of an indigenous literature ...

We are interested in receiving other highlights or reports about International Year activities in your area.

METHODOLOGY CONCERNS

Julia R. Van Dyken

Julia Van Dyken is currently serving as the Africa Area Literacy Coordinator for SIL, based in Nairobi. Prior experiences included linguistic analysis, translation and literacy work among the Jibu people in Nigeria (1968-1976); Director of Literacy for SIL collaborating with the Southern Regional Government of Sudan during its development of a bilingual education program (1979-1982); mentoring SIL's literacy coordinator in Senegal (1986-1988), and serving as consultant in a variety of language projects across Africa. She maintains active membership in the Africa Association for Literacy and Adult Education (AALAE). During two extended furloughs she completed studies at Indiana University: BA in Arts and Science concurrently with MA in Adult Education (1978) and PhD (1984), also in Adult Education.

How do any of us select a methodology for teaching reading?

One approach may be to study popular theories and methods in the highly literate societies of the North. But these often leave doubts about their appropriateness where cultures are different and societal levels of literacy are low.

Questions arise: How dependent are such methods on what contextual factors? If developed in highly literate societies, where even the toddler is daily exposed to print, can they also be adapted to preliterate contexts? Are they designed for children or adults? Are the learners nearly semiliterate before entering the classroom? What about the assumed level of education prerequisite for a training course for teachers to use the method?

Another approach may be to choose a methodology introduced among preliterate societies. This has almost become tradition for SIL across Africa. Following Gudschinsky's approach (1972), the method provided a way to *write* the materials, matching them to the culture and whatever the given language medium. (For a full explanation of her principles and perspective, see Van Dyken, 1984.)

Currently both the Language Experience and the Whole Language approaches enjoy popularity. Certain strong points have enhanced the spread of both worldwide. Recognizing this, Stringer and Faraclas (1989) have built on these methodologies, accounting also for most principles taught by Gudschinsky. They have developed a 'new' approach for literacy in the mother tongue. So far, pilot testing of this Multistrategy Method (MSM) looks very promising.

So what is our reaction? Do we grab for the new and throw out the old?--before fully testing the new? Can we keep a balance, continuing to use Gudschinsky's techniques where they have worked, and modifying them where needed? Or will we feel we must redo each primer in whose construction we have been involved?

Personally, I am encouraging people everywhere to read Stringer and Faraclas, and where appropriate to try it as the most likely method to succeed. We are inviting Mary Morgan to introduce the method in Eastern Africa in the 1991/1992 period.

However, I do hold reservations. In spite of its weaknesses, I have seen the Gudschinsky method work in countless situations across Africa. Thousands upon thousands have become literate through the use of primers written following the Gudschinsky guidelines and principles. Yet, I have heard it criticized unfairly and wished the speakers would read my explanatory chapter on the method (Van Dyken, 1984). I fear to dump out the baby with the bath.

Major reservations before fully supporting the new method include questions about: a) What level of formal education is required for teaching the new approach? and b) Can classes/schools afford to have the required two (or even four) teachers per class? I suspect the MSM will be easily adaptable to contexts for teaching adults, yet I do wonder if some adult learners might feel more threatened by the apparent lack of 'graded control' of how much is expected of them in the early parts of the Story Track. Further research is needed to help us all know in which settings to encourage the introduction of this method in Africa.

To conclude, my concern is that, before accepting the MSM as the cure-all for every literacy program, we should await the results of further research by Stringer and her colleagues. Let's test it in pilot programs across Africa and note such influencing factors as my reservations noted above. In the meantime, let us not reject the good work of those who have already prepared the primers in any given language. Let's also give credit, even in the MSM, to its forerunner (Gudschinsky), and the worldwide experience of SIL literacy workers.

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TAKING INTO CONSIDERATION CULTURAL LEARNING STYLES

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I. Introduction

When a society has had a written language only a short time, there are usually no members of the society who are prepared to teach language-related subjects to other members of their society--subjects such as grammar of their language, phonology, semantics, writing, punctuation, editing, etc. The teaching of these subjects usually falls on the linguists at first. Unconsciously the linguists will tend to teach these subjects from their own point of view and with their own cultural teaching styles. Is this effective? How can we know? In this article, I share a few experiences of teaching language-related subjects to Guahibo persons.

The Guahibo are a face-to-face, mutual-sharing, tribal society from eastern Colombia. The 20,000 or so members of the society live widely scattered over a large area that extends into Venezuela. Along with hunting, fishing, and gathering, they raise a subsistence crop of bitter manioc. Although changes are coming in, and in many areas they now have schools, Guahibo traditional basic thinking and learning patterns seem to be intact in most areas of the tribe.

II. Guahibo Learning Styles

In my experience, in teaching language-related subjects to Guahibo students, I have recently observed some unexpected (for me) behaviour that seems to indicate: 1) that inductive reasoning[1] is not normal for Guahibo, and 2) that abstract concepts (such as grammar

concepts) are difficult for them to learn. Let me give some examples of the behaviour I am referring to:

Example 1. Guahibo verbs have ten different endings that help identify verb classes. Within each of these classes there are several semantic domains. Three Guahibo students, nineteen years old or older (two are fifth grade graduates and one had had no formal schooling) could not find, in a list of words from any one class, the words that had similar meanings and might therefore be grouped into domains. (Induction.) However, when I gave them the domains that I recognized, they could rather easily group the words into those domains. (Deduction.)

Example 2. Another student, Raúl García, who is a bilingual school teacher, was trying to write a monograph on Guahibo learning styles. He was not able to draw conclusions about Guahibo learning styles from his experience. (Induction.) But given other people's descriptions of learning styles, he could pick out the ones that applied to the Guahibo and then illustrate them from his teaching experience. (Deduction.) When a Colombian with a university degree in psychopedagogy wondered why he had gone at things 'backwards', I suggested that it is the way the Guahibo think. They do not use an inductive approach.

Example 3. When I was introducing parts of speech and grammatical word classes to the three students in Example 1, with a very simple inductive type discovery method and giving them the definition last, they waited until I gave them the definition and wrote it down first. Then they wrote down the examples that I had presented at the beginning. At first I thought they had learned this from nonindigenous teachers, until I remembered that one of the fifth graders had never had a nonindigenous teacher (except me), and, of course, one of the students had never been to school.

Example 4. After I had taught Raúl García, the teacher, the Guahibo parts of speech and then the classes of each (i.e. noun classes, verb classes, etc.). I had him practice-teach the other three students. I had taught him by giving him the definition first and then the examples, which he wrote down. (Deductive method, but abstract concepts.) Because he showed interest I thought he was grasping everything. However, each time he was going to teach a class, he reviewed with me his notes, as though he felt quite unsure of himself. Then he taught the students just what I had taught him. Because he is a good teacher, he repeated and emphasized, but he didn't

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innovate. The students wrote down what he said, but finally one very motivated student complained that he was not understanding anything. My feeling was that none of them were, including the teacher.

I might not have understood this behaviour as being related to Guahibo learning styles had I not been supervising Raúl García, the teacher, as he wrote his monograph about Guahibo learning styles. The method used to produce the monograph was to read available literature (it was up to me to read the literature that was available only in English) and then brainstorm among three people: Guahibo leader Marcelino Sosa, Raúl García and myself. We did this for each section of the monograph, and then Raúl wrote up the results, adding illustrations from his experience. At several points, the manuscript received suggestions from SIL administrator-consultant Steve Walter. The end result was a 200-page manuscript which is being edited for publication.

From this experience, I received many new insights concerning how Guahibo learn, and I thought some of them would be helpful in developing a different method for teaching Guahibo grammar to Guahibo school children. I prepared some lessons, and both Raúl and I taught with this new method. We both thought it worked better than the previous method, and the three students felt they understood much better.

The grammar teaching method takes into consideration several ideas from the monograph. One is that Guahibo relate better to people and concrete objects and situations from their own life and culture than to abstract concepts. Grammar rules and definitions are abstract. Another is that Guahibo, in their classification system, tend to look at wholes rather than parts.. They group animals into those that live on the ground, those that live in the trees, etc., rather than according to their anatomy (teeth, claws, etc.) Inductive thinking, examining a body of material (such as their language), and then extracting and classifying meaningful parts, is foreign to them.

I am by no means indicating here that inductive reasoning and abstract thinking (or learning) are superior. They are useful in our society, where we are introduced to abstractions rather young in life. If they had been useful in Guahibo society, the Guahibo, too, would learn that way. As young children, we all learn by imitating. As we grow up, we, in our culture, begin to learn by more indirect methods, but the Guahibo continue to learn by observation and imitation. As a

result, they are usually more observant of details than we are, and they can look at something and then make it, or watch someone and then do it, better than we can. For example, my students can draw any species of tree or palm in their area, with the leaves, flowers, fruits, roots, etc. very accurately from memory. They can also pick up a basket, study it and then weave one.

However, it should be helpful for Guahibo students to learn how to use an inductive learning style, especially if they plan to continue their studies in nonindigenous schools. This is pointed out by others: "The goal that children become more versatile and adaptable to the increasingly complex demands of life in a postindustrial society may be reached by helping them develop the ability to switch cognitive styles ... or to draw upon both styles at any given time." (Ramírez and Castañeda 1974.154.) "One of the goals of most educational programs ... is to enable the preliterate to cope with the 'outside world' ... Academically to succeed beyond midprimary level, students must learn to conceptualize and manipulate information in the patterns of the majority culture. Traditional learning strategies, while useful initially, must gradually be complemented by new techniques." (Davis 1987.8.) Not only can learning to handle abstract material help the Guahibo learn the grammar of their language. It can also work in reverse. By studying their grammar, they can learn to handle abstract material.

III. Method for Teaching Grammar

The grammar teaching method we developed (along with the students, who helped Raúl and me see what wasn't working) was the one mentioned in Example 3. It is a combination of inductive and deductive study methods; it uses people and concrete objects to introduce abstract concepts. We wrote the lessons as patter in Guahibo for the teacher, with instructions for the teacher in Spanish. Raúl handles this method very well and taught the other three students without consulting me or even reviewing much (or any) ahead of time.

We taught the parts of speech, so we needed a word in Guahibo for parts of speech and another for the classes of these. We decided we could be best understood by using a comparison with the nuclear family *nacaemonae* and the extended family *penajipanabiwi*. So we called all nouns *penajipanabijumenë*, 'extended family words', and the classes (i.e. all nouns of one class) *nacaemonaejumenë*, 'nuclear family words'. Family is very important to the Guahibo, probably the most

important thing in their lives, and most all else is built around the family. This terminology seems to work very well, but, for names of specific parts of speech or classes (i.e. nouns or proper nouns), we often had to borrow a word from Spanish. Usually when we tried to find a descriptive term in Guahibo, it got too cumbersome; we ended up with a description or definition of the term rather than a name.

We introduced parts of speech by first introducing a person, using a proper name. The patter, written in Guahibo with Spanish instructions in parentheses, goes like this:

Verb-words. "Now let's write on the blackboard what Juan did in one day. What did Juan do after he woke up?

Juan woke up.
Juan ...
Juan ...
etc.

"All that Juan did are called **verbojumenẽ** 'verb-words'. That which we do is called a verb-word. Verb-words tell what we do. (Write this definition on the blackboard.)

"All verb-words are extended-family-words, because they all tell what we do." (Have the students write the definition in their notebooks, along with some verbs as examples.)

Note that we started with the concrete and cultural--Juan and what he did--before introducing the abstract fact that some words are verbs. Although the method begins with details, we didn't have the students draw the conclusions, at least not yet, so it isn't totally inductive.

The verb lesson is repeated several times, for second graders, with slight variations in the name--Sara, the health promoter, someone who went on a trip, one of the students, etc., using proper names. After the first lesson, the teacher doesn't tell the students again what kind of words they are (verbs); he asks the students. He also asks them whether they are nuclear or extended family words.

Nouns are taught by first asking what does Juan **have** (then Sara, etc.) and later, what does Juan *see*. These words work well in Guahibo; they may not cover all nouns, but they cover more than just what Juan might normally 'see'. We avoided asking what an animal has, because the students would name body parts, and in Guahibo

that is a class of obligatorily possessed nouns. They are nouns, but we prefer to stick with independent nouns at first, if possible. (Noun classes aren't introduced in second grade, except common and proper nouns.)

In Guahibo, adjectives are complicated; they are conjugated, like verbs. So, after nouns, we teach adverbs (part of them): *when* did Juan do each of those things, and, somewhat later, *how* did he do them. After that we teach proper nouns. Then we review everything and play some games. No more parts of speech are introduced in second grade. All of this is spread over forty-seven lessons, with notes to the teacher that they may add more review of each part of speech, by varying the lesson slightly, until they feel sure the students are handling it. Because the abstract concepts are difficult, lots of review is encouraged.

At about Lesson Twenty-eight, the children are asked to name the parts of speech of each word in very simple sentences, such as: Rose dug manioc; Today the-dog chased an-agouti (Guahibo has no articles); The-ant works hard; etc.

For eliciting proper nouns the procedure is changed a little. The patter goes like this:

> **Proper nouns.** "Today we will write on the blackboard the names you tell me. (Have the children give the proper names of the village leader, the teacher, the health promoter, and various children in the class--only the first name. Write the first letter of the names with a capital letter.)
> The leader's name is ...
> The teacher's name is ...
> etc.

"All those names tell someone's real name. Real names are called in Spanish *sustantivo propiojumenë* ('proper-noun-words'). A proper-noun-word tells a real name. (Write this definition on the blackboard.) All proper-noun-words are nuclear-family words." (Have the students write the definition and some examples in their notebooks.)

In later lessons they give names for dogs, towns, rivers, creeks, jungles, etc.

For the game, the students are divided into four groups: verbs, proper nouns, common nouns, and adverbs. These four names of groups are written on the blackboard. There are also six groups of four words for the teacher to write on the blackboard. In each group there is a verb, a proper noun, a common noun, and an adverb, but not in the same order each time. As each of these words is written on the blackboard one by one the students 'claim them'. If the word is a verb, the group named 'verbs' must shout, "Our word!". If they are correct, +1 is written after their group name. If any group shouts "Our word!" when it isn't, they receive -1. If no group claims the word, nothing is written. At the end, the students total their scores. (A Guahibo teacher will not make a big deal about 'winners' and 'losers' because it is a Guahibo value to be equal. Students are encouraged to be *as good as* someone who is very good. Guahibo never tell their children to try to be *better* than someone else. This game can be repeated by putting the students in a different group (changing the name of their group) and/or by utilizing new words.

The third grade grammar exercises teach intimate adjectives, citation adjectives, interjections, intimate nouns, independent nouns, classifier (general) nouns, impersonal verbs, pronouns, and direction adjectives (in that order). By the end of third grade, the pupils have learned all the parts of speech except conjunctions, which are not like English (no words for *and,* nor *or*) and they have also learned some classes of these.

Guahibo adjectives cannot be elicited in the same way as verbs and nouns, so questions were used, such as the following:

How are people when the sun is strong?
How is manioc bread when it hasn't been sunned?
How is a ballpoint pen when it isn't good?
How is clay when it is wet?
How is a tree that isn't short?
etc.

These questions had to be tested. Sometimes there was a possible answer that wasn't an adjective.

To introduce interjections, we gave a list of interjections to write on the blackboard and ask the students if the word is a 'startle-word' (said in order to startle) or an 'is-startled-word'. Then the definition of an interjection in Guahibo is given as: 'a startle-word or an is-startled word'.

To introduce intimate (inalienable) nouns, the picture of a person is drawn on the blackboard so the students can name body parts. To introduce classifier nouns, objects are brought to the classroom for identification. To introduce impersonal verbs, a list of verbs is put on the blackboard, and the students are told to identify the ones people do and ones people don't do, and so on. There is always a way of making the students do a little work before they are given the definition.

The fourth grade exercises teach the verbs of five conjugations, plural of independent nouns, singular and plural of collective nouns, diminutive singular and plural, augmentative singular and plural, singular and plural verbs, adverbs of veracity (evidentials), adverbs of emphasis (adverbs accompany verbs and other words), adverbialized nouns, adverbs that tell why, conjunctions, nominalized verbs, review of all parts of speech.

We are in the process of writing and testing the exercises for fifth grade. We are teaching tense and mode in verbs, adjectives and nouns; transitive, ditransitive and intransitive verbs; subject and object; direct and indirect object (the latter also includes what in English are objects of a preposition); noun and verb phrases; subject and predicate; independent and dependent clauses.

The exercises for second, third, and fourth grades were taught to the three students mentioned earlier and to others who participated for a shorter time, including one third grader. Raúl García took the exercises for second and third grades to teach in his village. He has written saying, "I taught them, and they are very good. The children always understood. If you have finished some more exercises, please send them ..."

This method of teaching grammar is active and participatory. The students are constantly using what they learn as they apply their new knowledge in the lessons that follow, rather than just learning by rote something they'll never use. Even those with no natural gifts for this subject can have some success because of the type of questions asked. ('What did Juan see?') The teacher can control the material, observe progress and add more review where needed or skip over review that isn't necessary.

My experience is that most Guahibo students get excited when they see that their language has a pattern of its own and that in many

ways it is more complex than the national language. It helps give them self-esteem and pride in their 'roots'.

IV. Method for Teaching Inductive Study Procedures

Besides the grammar lessons, we have also developed some exercises that teach inductive study methods. These are based on the Guahibo language, since it is a body of 'data' that is near at hand and available to all Guahibo speakers. (We borrowed the idea from Kenneth Hale[2].)

These exercises give the children a chance to examine the data and discover for themselves similarities in structure, meaning, etc. For example, the following words are written on the blackboard:

jawa	tanatanaica
toxotoxoca	sanajawa
jorojoroca	

The students are asked if any of the words can be grouped together. When they have grouped them, they are asked why they grouped them that way. They are coaxed until they give more than one reason. (Those verbs end in **-ca** or **-jawa**; those with **-ca** imitate movements; those with **-jawa** have something to do with heat.)

Then the students are given four more words (*weriajawa, sarasaraica, topojawa, xorajawa).* They are asked to see if they can classify them into the two earlier groups. From these words they may decide the words with **-jawa** have to do with fire rather than heat.

Then the students are asked if the following words fit into the above classes: sajawa, itsajawa, wocowocopa. They may decide to include **sajawa** with the **-jawa** words, but, if they do, they must broaden the definition, because **sajawa** means 'to sting' (like hot peppers or a burn). They will probably say **itsajawa** doesn't fit, because this **-jawa** means 'thing' (**itsajawa** means 'other thing'). They may say **wocowocopa** doesn't fit because it is singular (the others are plural; the act is repeated), or they may fix their definition to include it.

They are not learning parts of speech, but rather to investigate and discover relationships, and to classify items, without necessarily naming the classes.

Another variation of the exercise is to have the students name twenty words that start with **pe-**. After they are listed on the blackboard, a volunteer is called to put an x by the words he/she thinks should be grouped together in one family (like the people who live in the same house). When the student has marked the words, he is asked to tell what reasoning he used. Then the other students review the work to see if they agree. In a trial run, a student marked words that started with **pe-** ('his/her') and ended with **-to** ('singular'). Most were discovered to be body parts (obligatorily possessed). There were some other body parts that didn't end in **-to**, because they were plural; the students decided to include them in the family. The words that were left over were gone over to see if there were more groups, or why they didn't fit, etc.

These exercises also include a game similar to the one described earlier, but, instead of the groups being named for parts of speech, each group is given three words. For example, Group 1 is given three words that end in **-nae** ('tree'), Group 2 three words that end in **-bẽ** ('round thing'), Group 3 three words that end in **-ra** ('liquid'), and Group 4 three words that end in **-bo** ('area'). The groups must claim words they believe belong to their family of words. The groups of words that the teacher writes on the blackboard have five words (rather than four). In each group of words there is a trap word for one of the groups, and an even number of traps for each group by the end. There is a suffix **-bẽ** that means 'sorrow', a suffix **-bo** that means 'cylinder', and other words that end in **-nae** and **-ra** that aren't a tree or a liquid. If the students don't pay good attention, they get trapped, or they let their word go by without saying 'Our word!'. The teacher waits only a few seconds after writing each word. If the teacher starts to write the next word, it is too late to claim the word. The time can be adjusted to the ability of the students. They need enough time to read the word.

We have not yet tested these exercises with young students, but the older students liked them and got better and better at doing them. They liked the game, too.

V. Conclusions

This article isn't long enough to give a lot of detail concerning Guahibo learning styles, but I believe it illustrates how understanding more about the learning styles of a group of people can help in preparing better teaching materials. It also illustrates how special materials which use some aspects of the traditional learning style can

be used to teach a new learning style, to help students adapt in a bilingual, bicultural situation. There are also a few specific ideas for teaching grammar, including some games.

For those interested in studying the learning styles of an ethnic group, I will include a bibliography of material that was helpful to me.

Notes:

[1]Induction is reasoning from the parts to the whole, from particular facts or individual cases to a general conclusion, such as examining a body of data, isolating the parts, observing relationships and then drawing conclusions. Deduction, on the other hand, is reasoning from the general to the particular, from a known principle to an unknown, such as applying some known general principles to a new body of data and showing how the data illustrates the principles.

[2]"Let us make the assumption that it is a reasonable goal in modern education to prepare students to enter into fields which make essential use of the methods, concepts, and attitudes of scientific inquiry--i.e., to enable them to gain experience in constructing and articulating abstract explanations for superficially mysterious or contradictory observations. It is difficult to imagine a more effective tool for imparting such a skill than the scientific study of language. Linguistic science has the advantage over other sciences in that the data relevant to it are immediately accessible, even to the youngest of students, and it requires virtually no material equipment. Moreover, it enables the student to use his or her native language in activities which offer considerable intellectual challenge, an important requirement in the formal education of young children particularly." (Hale, Kenneth. "Theoretical linguistics in relation to American Indian communities," page 38 in Chafe, Wallace L. ed. **American Indian Languages and American Linguistics.** Lisse: The Peter de Ridder Press.

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Myers, Beatrice. 1987. "Cognition and Amerindian students of linguistics." *Notes on Literacy* Special Issue No. 3, 10-19. (Related to their study of their own language.)

Ramírez, Manuel and Alfredo Castañeda. **1974. Cultural democracy, bicognitive development, and education.** New York: Academic press. 189 pages. (Excellent, especially in the area of how to teach new learning styles.)

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Swisher, Karen and Donna Deyhle. 1987. "Styles of learning and learning of styles: educational conflicts for American Indian/Alaskan native youth." *Journal of Multilingual and Multicultural Development* 8.4, 345-360. (Excellent.)

"SPALDING WORKS FOR KERA, TOO"

Marian Hungerford

Marian graduated from Lutheran Bible Institute in Seattle, Washington, and there became interested in SIL through interests in Old English phonetic transcription. She attended Clackamas College, Eastern Oregon College, and Portland State University where she obtained a B.A. degree in anthropology. She later continued anthropology studies at UT Arlington. She became a member of SIL in 1973, and was assigned to Cameroon, where she became interested in Chad and began service there in 1978. Her service included Kera village living and literacy work, and helping with Yaoundé Africa Orientation Course (AOC).

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I. Introduction

In 1982, the SIL team moved into its program among the Kera people of Chad. With the help of a literacy consultant we produced a Gudschinsky style primer. We taught classes using the primer and had a certain degree of success. In 1988 the SIL team decided to capitalize more on the interests and abilities of each team member and so we divided the project responsibilities. I began to work primarily in literacy.

That same year, while on furlough in the U.S.A., three things happened: 1) I took a course in the Spalding Writing Road to Reading, 2) I spent a semester at Dallas taking literacy courses, 3) I decided to try something new, namely, to adapt the Spalding method of literacy to Kera.

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II. What is the Spalding 'Writing Road to Reading'?

Spalding notes that, "A good speller is invariably a good reader but the inverse is not necessarily true." Therefore the method does not focus on the teaching of reading. However, the end result is a class of good readers. It is a method of teaching which introduces the basic phoneme-letter units, called phonograms, through writing. It uses no workbooks or primers. Each student needs only paper to write on and a pencil. It is based on the neurological studies of Samuel Orton and uses the idea of kinesthetic associations to reinforce visual images. The method is becoming more widely known in the US since it was highly recommended by the National Academy of Education which published *Becoming a Nation of Readers.* It teaches students to be analyzers of the patterns of their language and quickly leads them to be creative writers.

Spalding teaches the various phonograms in isolation without word or picture association. The phonograms then form the building blocks for writing and reading. A phonogram can be a single written letter, learned from its introduction with all the possible pronunciations of that letter in order of frequency, as in the phonogram written \c\ which is pronounced \k, s\. Or it can be a group of letters as the phonogram written \igh\ and pronounced \ay\.

The process of writing each phonogram emphasizes correct letter formation. This encourages writers to visualize accurately and clearly what the letter looks like. Spalding insists on beginning with 'clock' phonograms. These begin at two-on-the-clock and are written counter clockwise, for example c, o, s, d, etc. This helps the student know where to begin writing and in which direction to form the circle. This kinesthetic action helps prevent letter reversal. After the nine clock letters of English, phonograms are taught in order of utility and frequency, and grouped to help learn spelling rules.

Students of Spalding then work through a standard spelling list that builds these phonograms into syllables and the syllables into words. In Spalding, the students do not copy but are taught the analytical process of proceeding logically from the sound of the phonogram at the beginning of the word through the first syllable and right on to the end. Functors and content words are not taught separately because functors follow the normal syllable patterns of the language. At a given point in the standard spelling list, the students begin writing their own original words and eventually create their own

sentences. Their own creations become the basis for their first 'reading.'

III. The Spalding Method Adapted to Kera

1. Background

I was particularly interested in adapting the Spalding method to Kera because it is a method that focuses on writing instead of reading. My first target group was the thirty lay pastors. Many had a predisposition to expect failure in learning to read because of previous experiences in public school or in classes at Bible school. The Gospel of Mark had just been published in Kera and we wanted to see it used in the churches. We wanted to help the lay pastors develop reading skills so that they would have confidence in their ability to read Mark in Kera in front of their congregations. These pastors wanted to learn but they did not think they could. So I invited them to come and learn to write their language. And they came.

2. Introducing new phonograms (letters)

The Kera phonograms are, unlike English, always represented by single symbols and will be referred to as 'letters'. The students had paper of some sort to write on that had lines with a center division. We began with the nine Kera clock phonograms: a, ɓ, c, d, ɗ, f, g, o, s.

For the letter \a\, the teacher patter was as follows: "This says \a\. Here is the way we will write \a\ and here is how it sometimes looks printed in a book \a\. They both say \a\. Altogether say \a\." When they had said \a\ a few times, I said, "Look closely at \a\. It is a short letter. There is nothing written on the top part of the line but \a\ completely fills the bottom part of the line and sits solidly on the base line. Here is how we write \a\." I wrote on the board as I described exactly what I was doing. "Write in the bottom half of the line. Put your pencil not straight up, not straight right but in between, write up and toward your body and make a circle that touches the mid-line and circles down to sit solidly on the base line, and continue up to touch the starting point. Without lifting your pencil, draw a straight line down to touch the base line." Being so explicit is very important.

I wrote the new letter several times, after each time instructing, "This says \a\, say with me, \a\." Then I called for a volunteer to

come in front of the class. The volunteer first wrote the letter over the circle with chalk just as I had done. Then he wrote beside the circle and finally when he could do it well, wrote it on the line above, an example of 'his' work for all to see. Then he returned to his place and began to write on his paper while another student came to the board. Each time, the full explanation was given while the student wrote at the board. Each time a student wrote on his paper, he pronounced the letter.

When all the students had written on the board and several times in their notebooks, they exchanged papers and 'read' what their classmates had written. They practiced writing in their notebooks until they formed the letters fairly rapidly and correctly.

During the initial teaching of each letter all the possible ways of pronouncing that letter were taught. This was the place where allophones or dialectical differences were explained, e.g. "We may pronounce it another way but this is what we need to think in order to be able to write/spell it correctly."

In the first three sessions of class, I taught all nine clock letters, three per class. Then we reviewed these nine letters for several classes by using them in spelling words. That meant we needed to find words using every possible combination of the nine letters. (It was not too difficult to find such words in Kera since the language has many monosyllabic words.) At this point the learners' enthusiasm rose visibly. We began each session with a review of the previous letters learned. The class was asked to write them. That meant dictation and hard thinking instead of copying. At the end of each session, the students exchanged papers and read each other's spelling words. The nine initial clock letters in Kera comprised one third of the orthographic inventory.

In the initial stages of reviewing how to write a letter, I stood at the board and asked the students to explain to me the way to write the letter. This forced them to visualize and think exactly what they were writing and in what order. It quickly taught them to use phrases like 'touch the line', 'straight back', 'fill the space completely with the circle', etc.

One of the important parts of teaching by using the Spalding method is distinguishing the relative sizes of letters. This feature makes a page look neat and makes for writing that is legible to other people. I distinguished tall letters, short letters and letters with tails.

The review lessons at the beginning of a class session included sequential letters like \d o g\ or \s g ɓ\ which put relative size and position in sharp contrast.

After teaching the clock letters, I tried to order the introduction of new letters on the basis of frequency counts. In addition to frequency, I looked at the way the letter could be written in manuscript and cursive writing, then grouped letters by the same initial written motion. This gave me a teaching order like this:

a ɓ c ɗ d f g o s
ɔ
k i u ŋ t
e (to pick up the last vowel)
w r y l n b m j h p
v
-z

The most complicated letters to teach in Kera turned out to be the \w\ and \y\ because they function as consonants and as semivowels. I first taught them as consonants in the word initial position because that seemed easiest for the students to hear. I then taught them word medial, though still syllable initial. Last of all, I taught them in syllable final position where they function as semivowels.

3. **The syllable**

The Spalding method places strong emphasis on the analytical skills necessary to spell from dictation without copying. A foundational idea is the syllable. The first sentence asked in helping a student spell a word is "How many syllables?" Even before we got to two-syllable words, we did syllable practice through a clapping game. We clapped and counted the syllables in every student's name and of all the objects in the classroom I could think of.

The Kera build houses with mud bricks and the word for mud brick became our word for syllable. Just as a mud brick can be composed of clay, water, and chopped straw, a syllable can have a beginning consonant, a vowel, and an ending consonant. Just as some people prefer to make their mud bricks using only clay and water, a syllable can have a vowel and just one consonant, either initial or final. Just as a mud brick is pounded into a mold and becomes a unit, so a Kera syllable becomes a single unit. A dried mud brick can be moved around in space, carried here or there, stacked up or laid

out in lines. The brick is then used to build a wall, laid end to end and mortared in place. A syllable can be used much like a brick to build something bigger, a word.

Classes needed practice in syllable drills like /ko, ki, ku/. However in the Spalding method the students do the analytical work of setting up the paradigms. There is no copying of things already written on the board or reading of examples already printed in a primer. The teacher dictates the drills syllable by syllable. When the first syllable is dictated, it is read back by a student from what he has written on his paper and the teacher then writes it on the board. The teacher asks the class, "Does your paper look like the board? If not, fix it now." When everyone is ready, the teacher dictates the next part of the drill. There is immediate correction or affirmation. The syllable drill ends up on the board in front of the students' eyes as in a primer; it just travels a different road to get there.

4. Attack skills

Spalding teaches attack skills for writing any new word. We pronounced the word, divided it into syllables and then systematically tackled it syllable by syllable. This becomes the 'teacher's patter', a series of questions to help the student think through what he needs to write. 1. How many syllables does the word have? What are they? What is the first one? 2. Is your voice up or down? (i.e. tone.) 3. Does it start with a vowel or a consonant? 4. Which vowel would you choose? Do you say it with your nose? (i.e. nasalization.) 5. How does the syllable end? etc. We borrowed the French terms for vowel and consonant but used Kera terms for everything else.

As soon as the clock letters had been taught, I wrote them on the board in a chart that gradually became filled in as other letters were added. This arrangement of letters helped some students think through their choices in logical order. The finished chart looked like this:

a o ɔ i u e	vowels and their variations
c f s k t p ɓ ɗ	voice up consonants (implosives pattern with voiceless)
d g b j v z	voice down consonants
m n ŋ	nose letters
w y r l h	the rest of the letters

5. Classroom reading of good literature

In the Spalding method the teacher spends much time from the beginning reading good literature to the class, enlarging vocabulary, explaining the meaning of words and talking about content. This is in addition to the 'class'. The good literature chosen was the Gospel of Mark. We read the text several times, giving more than one person the opportunity to read Kera out loud, if there was someone present who was capable of reading at that level. Since one of the main goals of the class was to help the lay pastors have confidence reading Kera in front of their congregations, I spent quite a bit of time having the students read out loud if they could.

Further reading practice came from reading their own written work, their neighbors' work and the teacher's writing on the board. I never taught them to read. But more than one student came to class bubbling with excitement and made the statement, "Marian, I was just looking at the hymn book and I could read it! I know lots of the words now."

IV. In Summary

Some *salient features* of the Spalding *Writing Road To Reading* are:

1. The focus is on learning to write and spell and the analytical thinking related to it. Students are not 'taught' to read.
2. When a phonogram is introduced, all of the pronunciations of the phonogram are taught.
3. In contrast to other literacy methods, it does not use primers.
4. There is no differentiation between functors and content words. From the beginning students are taught about syllables and the important features of their own language (like consonants and vowels).

Some advantages of the Spalding method:

1. It is simpler and cheaper than a primer approach. The student needs only a writing implement and something on which to write.
2. Most students, even the less able, progress rapidly and surely.
3. The emphasis on letter formation fixes clearly the written form of the letter in the student's mind.

4. There is a great motivating power as students create readable words and sentences very early in the program.

The use of the Spalding method among the Kera is still in the experimental stages but it has already taught several lay pastors to write legibly in their own language so someone else can read their thoughts. The method is tremendously cost effective. It excels at creating interest through its focus on writing and good literature. It can replace failure expectations or low self-esteem with high motivation and excitement.

Today there are Kera who can read though they have only been taught to write. Maybe the method can work for you.

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The Spalding Educational Foundation, c/o Warren North, 221 Palm Aire Drive, Friendswood, Texas 77546 will provide information on training courses for teachers.

DEVELOPMENT OF A WRITTEN STYLE AMONG NEWLY LITERATE PEOPLE

Todd Poulter

(Editor's note: This article was written some time ago, but the content is still apropos to situations today.)

Todd has taught primary grade children in public school in the U.S., has done fieldwork with SIL in Ghana and is at present Assistant Area Director for Africa, with headquarters in Nairobi, Kenya.

Teaching reading to First and Second Graders in a public school in the U.S. may seem a far cry from working in a literacy program among a newly literate people. But at least one parallel has been observed in building the bridge between oral and written communication, particularly as it relates to the development of a written style distinct from that of the oral.

Many have successfully used a language experience approach to reading, involving such activities as recording verbatim what students actually say, and then having them read it back. It's their own words, they know what they've said, and the feedback is immediate. True, there may be more memorization than reading going on initially, but with repeated opportunities, reading takes the fore.

In one case, the visit of several boa constrictors (along with their keeper) to a First Grade classroom provided a springboard for an animated discussion of snakes, what it feels like to touch them, and how they live. Some of these ideas were then written down on the chalkboard as the children offered them, and later several classroom books were made, using the children's own language.

Throughout the year, the children in this room also did weekly 'cartoons', coloring and cutting out a ditto of familiar cartoon characters, and then dictating a conversation to an adult to write down for them, again in their own words.

Very little was ever said about the acceptability or grammaticality of any particular word or expression that the children chose; if they said, "He a big man", that's what got written down,[1] so that there would be a match between what was said and what was read. But in the course of doing many such chalkboard stories and cartoons, the teacher noticed something curious. After a dictated statement had been written down, the children sometimes did some unconscious

editing when they read it. Thus the spoken, "I don't wanna go" might be read back as "I don't want to go", or even "I do not want to go."

What was going on? Quite possibly, the children sensed an increased formality associated with writing and reading over against speech, and they were unconsciously correcting as they read back what they had said.

Here is where the comparison with newly literate peoples may conceivably be drawn, as they initially develop a written style in their language. It should not surprise us that such a written style diverges from the oral, as it does in major world languages, though even that seems to take many of us aback at first. But what is even more surprising, and has been noted by many working among the newly literate, is that they seem to have an intuitive sense of what elements should make up their written style even before any body of literature has been produced.

Reactions to direct transcriptions of speech texts evidence this fact in the Highlander bilingual education project in Vietnam, "... the people strongly objected to certain speech elements being written just the way they spoke them in normal speech ... 'We know that's the way we talk, but it doesn't sound right written that way. It should be this way ..."[2]

What is probably the most difficult thing for an outsider to do as a body of literature begins to be produced is to keep hands off as far as actual elements of style are concerned, and let the vernacular literature develop in its own way. Sarah Gudschinsky emphasized this idea: "One of the most basic factors in a successful literacy program is letting the vernacular style develop by itself without any instructions from us."

This doesn't mean, however, that no input should be given to indigenous authors as they begin to write. If this were so, there would be no need for writers workshops that have proved to be very effective.

Rather, based on the reports of those with experience in this area, this paper proposes the use of a short list of questions regarding written style, in the hope that some of them may prove productive as a follow-up in a particular language. The question format provides an alternative to prescriptive approaches which have attempted to lay down universals of written style, but which have not necessarily been applicable to the wide variety of languages currently under study.

For a given language, certain of the questions may have no bearing at all. But it is hoped that some of them may prove useful in languages where indigenous authors are beginning to write, and that as more research is done in this area, a more productive list of questions can be formulated. The questions have been grouped roughly into categories in an attempt to organize them in an orderly fashion.

Audience

Who is the audience?

What cues will they need?

Is the audience in the writer's mind as he writes?

Is the language simple enough to be understood by a twelve year old?

If speakers of more than one dialect will be reading the material, has editing been done (by one or a group of individuals) to eliminate as many unacceptable words or expressions as possible?

Grammar

Does the written style need to be more concise, or more elaborated, than the spoken?

Is there information implicit in the oral communication that needs to be made explicit in the written mode?

Is the level of redundancy such that it allows for inclusion of sufficient information to make the meaning plain, without overloading the reader?

Is there a need for overt marking of participants, clause relationships, paragraphs, or other features?

Is it necessary for the written text to be *more* or *less* strict with chronology and logical sequence?

Does the purpose for which something is written, or the type of literature it is, affect its composition and style?

Editing

Is it more productive to have the author edit his own work, or to have someone else do it?

Has attention been paid to who is doing the writing and editing? Are there cultural factors that must be considered to avoid potential difficulties? (Male/female, older/younger, high/low status, inclusion/deletion of author's and editor's names)

Is individual editing or group editing a more productive way to discover the vernacular rules of written style?

Is it helpful to record such language-specific rules as they're 'discovered' for reference during editing?

If so, do you train writers to use these rules as they write, or only later during editing?

If individuals edit their own work, how much time should elapse between writing and editing?

If a bilingual speaker does the editing, has there been a check to see that the editing does not reflect the influence of the second language?

Text comparison

Has any comparison been done between a story told orally first, and then later written by the same person without reference to the spoken version?

Has a general comparison been done between 1) texts transcribed from tape, 2) edited texts transcribed from tape, and 3) texts which originate in the written form? Does this give any clues to writing 'rules' operating in the native speaker's mind?

Speech patterns

How have elements of the spoken style such as intonation, pause, gestures, speed, and context been incorporated into the written style?

Are the speech patterns emphasized and clarified by the punctuation, or violated?

How have quotations been dealt with in the written text, especially to distinguish between speakers?

Phonology

Are there phonological distinctions lost in oral communication (contractions, consonant/vowel elision) which should be preserved in the written mode?

Loan words

Is there any reaction to inclusion of loan words in written literature?

Conversation

Have conversational texts been analyzed to get at natural style?

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Format

Who has determined the actual format of written documents, and how has it been done? (size of paper, type, lines, paragraphing, illustrations, colors, binding)

Notes

[1]This is not to say that the teacher was unconcerned about such expressions, but rather that discussion of them was taken up at another time when oral language was the focus.

[2]SIL 1970, SIL and the Highlander Education Project, unpublished paper, pages 1-9.

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READING CAMPAIGN, APRIL 1990

Marjorie Kalstrom and Jeanne Austin

Marjorie, from southern California, has a BS degree in nursing from UCLA. She began working in Atzingo in 1965. Jeanne, from Iowa, has a Bachelor's degree from the University of Michigan. She began working in Atzingo in 1970.

When we left the U.S. on April 6th to hold a two-week reading workshop in the Popoloca village of Atzingo, in Mexico, we didn't know what to expect. We had many materials, booklets and charts prepared. We hoped for fifteen or twenty students; there were fifty-four! Needless to say we were very, very busy. Thankfully we had both Virginia Embrey, one of our literacy staff, to help us, and also Miguel, the Popoloca pastor, who was ready to jump in and provide good leadership as well as to help teach.

Imagine, if you can, a small, one-room cement block church, with a curtain dividing the area into two classrooms. On one side was a class of twenty-seven men, boys and young women who were learning how to write in their own language, to read more fluently, and to help others learn to read. Jeanne and Miguel taught this class. On the other side of the curtain there were twenty-six women and one man, plus around fifteen babies and small children. This group were the nonreaders who were trying to master the basic concepts of reading and writing. Marjorie and Virginia were in charge of this class.

Classes were held five days a week for five hours each morning, with a half-hour Kool-aid and cookie break. Almost all the students were very regular in attendance and were really serious, wanting to learn well. We were very tired at the end of the two weeks, but it was a joy to teach such an eager group. Many of the people in the beginning class began to get the concept of reading, and some completed the beginning primer and are now ready to go on into the second primer. In the advanced class, everyone learned to write his language fairly well and some even began writing short stories. Everyone improved in his reading ability and most of them were able to read quite well from the New Testament by the end of the time.

At the end of the two weeks, we had a special program, at which all the students received certificates stating that they had participated in the workshop. To us, the outstanding thing about the workshop was the great desire the people had to learn and their tremendous thankfulness for the classes.

MANAGEMENT OF TEXTS FOR READABILITY

Doris Porter

Doris Porter worked for nineteen years in the Philippines as linguist-translator in two language projects. After completion of the New Testaments in those languages she served six more years as Coordinator of the Philippine Branch Literacy and Literature Use Department. She is currently head of the Sociolinguistics Department in International Administration in Dallas. This article was written when she served as literacy coordinator in the Philippines.

I. Introduction
II. Factors which Affect Readability
  A. Major physical factors
  B. Major textual factors
III. Summary

I. Introduction

I think we can safely assume that we all recognize the importance of readability considerations when preparing literature. We want what we produce to be read, and the more difficult and complex the material, the less likely it is to attract readers.

Although a good deal has been written on this subject outside of SIL circles, there doesn't seem to be much said about the areas that are of special concern to us in SIL who are working in literacy and literature production. Evaluation techniques such as readability formulas and discussions about testing and measuring are helpful to some extent. However, information that will guide us in controlling specific levels of difficulty when we are designing materials seems to be more what we need. Although some of the relevant factors in text management have been addressed in scattered articles or papers appearing in SIL publications, this is an attempt to summarize and put in one place the major factors to be considered. Hopefully it can serve as a checklist of items we want to think about when preparing literacy materials.

II. Factors which Affect Readability

It may be helpful to sort out readability factors from two points of view. One concerns physical elements, that is, those aspects which relate to appearance. The other is the content or textual side.

A. Major physical factors

1. Layout

How a book is formatted will greatly influence its attractiveness and thus its readability. Lots of print on a page, with narrow margins and crowded lines, is very likely to discourage a reader, especially a new one. As a rule of thumb, the less experienced in reading our audience is, the more white space we would want to allow. This means we will want to give careful attention to the amount of print on a page so that we are sure to make the proper allowances for different levels of reading experience. The same principles that apply to print also apply to layout of illustrations.

2. Size of print

Grading materials in terms of print size has long been standard practice. The progression generally runs sixteen and/or fourteen point sans serif for prereading and primer material, fourteen and thirteen point for easy readers, used immediately after acquisition of the reading skill, and twelve point in most other supportive literature. Less than eleven point is usually not recommended unless there are special reasons for using the smaller size.

3. Book size

There seems to be something about book size that engenders a certain psychological response. We tend to feel that the bigger the book, the more difficult it will be to read. Whether book size and degree of difficulty are significantly related or not, the psychological reaction is nonetheless real. Therefore a new reader may be frightened off by a piece of literature that looks too big and complicated. For that reason we would probably want to consider small books for early reading material.

In addition to the psychological response, there is the confidence-building aspect that occurs when one is able to complete something fairly quickly. The reader feels good about himself when he has been able to finish a book, and the resulting satisfaction encourages him to try another one.

4. Book quality

When making decisions about the standard or quality of the book you are producing, it is important to remember that the primary qualification for readability is clear, legible print. This does not

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necessarily mean using the most expensive materials and processes. It is important to keep our publications of a quality comparable to that of other literature that may be available to the audience at which we are aiming. To raise the quality to a much higher standard makes the other literature look poor by comparison. On the other hand, if it is much below the acceptable standard, it is likely to be rejected.

Also, we want to keep in mind the potential for ongoing literature production by the indigenous community. Therefore we would not want to set a standard that would raise the expectations beyond the realm of possibility when production is in the community's hands.

A further consideration has to do with how long you want the materials to last. Consumable materials do not need to be as durable as books we expect will be used for a long time. Therefore the quality of the materials used, such as paper and cover stock, is a factor to be considered.

B. Major textual factors

1. Subject matter

An accepted theory in reading is that the more familiar the subject matter, the easier it will be to read. Therefore, beginning readers will find material relating to known concepts and ideas easier to read than material which introduces new concepts. That is why familiar folktales and personal experience stories from the same cultural group make good beginning reading material. Subject matter beyond the conceptual levels of the readers will increase the level of difficulty of the reading material.

2. Redundancy

Control of vocabulary items, drills and even formatting so that there is sufficient redundancy and/or consistency will help the new learner to be successful in his reading experience. There is a certain amount of security in the familiar, so if we present new material too fast it will result in overload and confusion. Graded material that progresses slowly helps to build confidence which is very important in motivating the new learner to persevere in his learning task.

3. Sentence control

I think experience has taught us that it is not so much the length of sentences which makes reading difficult, but rather the complexity of the sentence type. Testing needs to be done for each language to

determine what constraints may be necessary. The perception that short sentences are easier to read than long ones does not seem to be necessarily true. If short sentences are unnatural, uncommon constructions, using them could in fact be counter productive to our goal of producing easy-to-read literature. I think we can safely say that we want to avoid the "See Dick. See Jane. See Dick and Jane" syndrome.

4 Discourse connections

The task of learning to read is complex and the learner has to apply many newly acquired skills. Therefore we do not want to add to his burden by leaving blanks in the discourse level connectors. Each bit of implicit information that the reader has to supply will make the task that much harder for him. Therefore, connectors expressing clausal, sentence and paragraph relationships should be explicitly stated. Such a statement presumes that the designer of the materials has done discourse analysis of the language in question and so understands what these connectors should be.

5. Story length control

Just as a long book might scare off a new reader, so a long story might put him off. Knowing that he won't have to struggle long and hard to get to the end of the story, is likely to encourage the learner to attempt what he might otherwise resist.

6. Language cues

There are a number of possible ways to supply cues to the text so that predictability is enhanced. Some of these are:

a. alliteration -
"The great, gray, green, greasy Limpopo River..." Kipling: The Elephant's Child

b. rhyme -
Jack and Jill
Went up the hill

c. semantic sets -
mother and father
fork and spoon

d. opposites -
black and white

night and day

e. sentence frames (a form of redundancy) -
This is a cat.
This is a dog.
This is a bird.

Note that the illustrations given above are from English, so, of course, the same illustrations will not apply across language boundaries. One would need to look for the appropriate correspondences.

7. Picture cues

There is a saying that a picture is worth a thousand words. Make use of illustrations. But the illustrations must be checked carefully with native speakers in order to be sure that they are communicating what you expect is being communicated.

III. Summary

In summary, first we need to remember that there are two angles from which to look at our materials: the physical appearance and the text itself. In terms of what the material looks like, the most important factor is legibility. After that come the psychological factors such as book length and quality. With regard to content, the rule of thumb is to control the factors which influence predictability. Generally, the more predictable the text, the easier it is to read. We would want to balance this adage, however, with keeping interest level up. If the material is too predictable it could result in boredom.

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Homemade duplicators

Make your own duplicator with easily available ingredients:

Recipe: 4 oz. gelatine, 17 oz. glycerine, 3 oz. sugar, 10 oz. water. Sprinkle the gelatine into the water in a strong pan. Add the glycerine and sugar. Heat gently, stirring all the time to fully dissolve the gelatin. Allow mixture to boil gently for about 7 minutes. Allow to cool slightly, then skim the scum from the surface with a spoon. Pour the skimmed mixture into a strong plastic bag. Leave to set overnight before use.

Instructions:

1. Prepare 'master' using carbons or hectograph pens.
2. Put approximately 1/2 tablespoon warm water into the tray containing the jelly. (More may be needed.) Leave for one minute to thoroughly moisten the surface.
3. Blot dry with a sponge and lay a spare piece of paper on surface. Remove paper and check surface for excess water.
4. Place 'master' face down in the jelly bed for 1-2 minutes. Smooth down carefully.
5. Remove 'master'.
6. Ready to print. Place printing paper (any quality) on jelly bed. Peel off. Allow increasing transfer time as copies are made.
8. When finished dampen jelly with warm water. (Cold will do.) Mop off surplus water with a sponge. (Check corners.) Dry off one sheet of paper placed on the jelly bed.

Be careful not to leave damp patches on the jelly, or green mould could appear. (Then jelly would need to be melted and 1 teaspoon of deltol put in before reuse.)

The surface can be reused in approximately 24 hours, except when using the washable pens, when it can be reused immediately.

For further information, contact Hecto Duplicator Company, Mawdesley, Ormskirk, Lancashire, L40 2RL; Telephone: Rufford(0704) 822724.

Book Review

C.N. Candin, general editor; J. Charles Alderson and A.H. Urquhart, eds. Reading in a foreign language. Reviewed by Carolyn Hostetler and O. Shell.

As the title states, this book, while covering many aspects of reading, zeroes in specifically on reading in a foreign language. There are fourteen chapters by different authors who deal basically with the questions: Why is reading in a foreign language difficult? What can be done to make it easier? The reader and related factors are covered in the first five chapters, the text is looked at more specifically in chapters six to ten, and the interaction of reader and text is, broadly speaking, the topic of the final four chapters.

Chapter 1: Reading in a foreign language: a reading problem or a language problem? by J. Charles Alderson.

Alderson addresses the problem, is difficulty in reading a second language because of difficulty in understanding the text or in the interpretation of grammar and vocabulary. A pertinent question is, Is reading in a foreign language easier if the skill of reading is first learned in the reader's mother tongue? For example, he says that in Latin America, especially in Mexico, it is thought that the reason why students can't read adequately in English is because they can't read adequately in their mother tongue.

Alderson first presents some speculations, among them: Jolly (1978) claims that reading in a foreign language requires the transference of old skills, not learning new ones. Therefore we would say that a student who fails to read in a foreign language either did not possess the 'old skills' or he failed to transfer them. On the other hand, Yorio (1971) claims that if students are having problems reading in a foreign language, it is due largely to their imperfect knowledge of the second language and therefore they let the mother tongue interfere in the reading process. Because of this, they are not able to pick up the correct cues in guessing and predicting.

Speculations lead to two competing hypotheses: (1) Poor reading in a foreign language is due to poor reading ability in the first language. (2) Poor reading ability in a foreign language is due to inadequate knowledge of the target language. Modifications of these might be (1a) Incorrect strategies, for reading in the foreign

language--they must differ from those used for the native language; (2a) Reading strategies in the first language not being used in the foreign language due to low foreign language ability.

The implications for dealing with foreign language reading problems as highlighted in the hypotheses are given. There was considerable support for the hypothesis which implies that some sort of threshold or language competence ceiling must be attained before existing abilities in the first language can begin to transfer. There are still many questions regarding the nature, level, etc., of the threshold, and also whether a higher level of competence in the second language will compensate for a poor first-language reading ability.

In their summary of the chapter Alderson and Urquhart say it is very difficult to believe that a good mother tongue reader cannot transfer his skills of reading into the foreign language. They also say that it is obvious that a skilled mother tongue reader will need some knowledge of the foreign language before he can read it with much competence.

Chapter 2: Learning from the perspective of the comprehender, by John D. Bransford, Barry S. Stein and Tommie Shelton.

Background knowledge of the reading material is important for the student in order for him to understand what he is reading. Such knowledge provides the information for understanding why the details are significant, and provides means for identifying additional implicit information.

Chapter 3: Cultural knowledge and reading, by Margaret S. Steffensen and Chitra Joag-Dev.

If the reader does not have the background information on cultural items he will read meaning into them that fits his own cultural grid. Therefore it is important to avoid heavy cultural loading when testing reading ability.

Chapter 4: Learning from text: methods of affecting reader intent, by James M. Royer, John A. Bates and Clifford E. Konold.

The question considered here is whether it is possible to manipulate and control intent so that readers will learn more from a text than what they would normally acquire. Three techniques for

controlling readers' intent are reviewed: presenting readers with learning objectives as to what is to be acquired from the text, inserting questions into the text, asking questions that require more than recall of information from the text. The Personalized System of Instruction (PSI) uses study questions and the students work harder because they know that they will have to pass the quizzes before moving on to new material.

Chapter 5: Cramming or understanding? Effects of intrinsic and extrinsic motivation on approach to learning and test performance, by Anders Fransson.

Extrinsic motivation for learning is where the reasons for the learning effort have nothing to do with the content of the material being learned, but are a means for achieving some desired end result. E.g., the reader tries to find out what it is his parents or teacher want him to learn from a given text. Level of anxiety could be considered a proper expression of level of motivation.

Intrinsic motivation is total involvement of self and lack of anxiety. The main reason for learning is the relevance of the content of the material to the learner. He is free to experiment for the sake of satisfying his curiosity and increasing his competence in what he is doing.

Experiments carried out concerning the effects of intrinsic and extrinsic motivation are reported. When the motivation is to meet test demands, while the reader has little interest, he is likely to adopt a surface-learning strategy. On the other hand, a reader motivated by the relevance of the content of the text to his own interests will adopt a deep-level learning strategy. Thus, for deep-level processing, one must avoid threatening conditions.

Chapter 6: Linguistic competence of practiced and unpracticed non-native readers of English, by Malcolm Cooper.

Practised reader is a person who has had most of his previous education through English, and is expected to be able to cope with demands of his university textbooks.

Unpractised reader is a person who has had most of his previous education in his mother tongue and has studied English as a foreign language. He is considered to be at a disadvantage when he is confronted with university level textbooks.

Different tests were given. Unpractised readers showed inability to understand word meaning from context, lexical cohesion and the meaning relationships between sentences. They were weak in their understanding of semantic relationships between words. Practised readers have greater ability to understand meaning relationships above sentence level: sentence connectors, etc., but for syntactic features of time, aspect, modality, both the practised and the unpractised readers showed weaknesses.

Chapter 7: Syntactic components of the foreign language reading process, by Ruth A. Berman.

Syntax is considered as it occurs in the text material, based on utterance rather than sentence. However, the interaction of syntax and the readers' processing strategies is basic, e.g. readers in English look for agent noun and action verb; the interaction may be affected by the readers' expectations, based on syntactic features of his native language. Syntax seems to be more important at sentence level. It seems that when students were able to break up the syntax of a sentence, even just inserting a comma, it was more understandable to them.

Chapter 8: The effect of rhetorical ordering on readability, by A.H. Urquhart

The criteria adopted for 'readability' were speed and ease of recall. Good organization of the reading materials, as to time order and space order, can significantly alter how much detail the reader will be able to recall from the text which he just read. On the other hand, reading material should not all be made simple for the foreign reader since he will come across subjects that are harder. But for the sake of the beginner it is good to have good organization at first.

Chapter 9: Simple, simplified, and simplification: what is authentic? by Alan Davis.

The issues discussed here are: (1) simplicity in relation to language, (2) simplification and authenticity in reading material, and (3) simplification as related to audience comprehension. As to (1), simplification is deliberate and used for pedagogic purposes, as with small children or foreign language learners. It results in not a simpler language system but a restricted sample of the full system. The simplification is determined by the needs of the audience. As to (2), simplification is a pedagogic device, and what is not simplified is the 'authentic' text. In the latter. the reader cooperates with the

writer to comprehend the text. In (3), comparisons between texts as to simplification must be based on comprehension of the readers. It is pointed out that simplicity, a linguistic interest, is a function of the language; readability, a psycholinguistic interest, is a function of the reader. Altering word or sentence length is no assurance that readability has been improved.

Chapter 10: Aspects of vocabulary in the readability of content area L2 educational textbooks: a case study, by Kay Williams and Don Dallas.

Vocabulary is crucial in readability. The use of idiomatic expressions and homonyms in a textbook that is written for use in a country where English is the foreign language is not good. Students take the meaning of each individual word and they can't make sense of the phrase, e.g., 'Working off steam.' For idioms, students tend to concentrate on the primary meaning rather than the modified meaning. Giving examples of definitions rather than just explanations makes the material more readable.

Chapter 11: Reading and communication, by H.G. Widdowson.

In written material, the writer is not actually in physical confrontation with the reader, and is in no immediate threat as he would be in a conversation with someone. However, he must take acceptability into account, not using terms that would belittle or insult the reader. Written discourse is not usually directed to a particular person (except in a personal letter), but to groups, and the reader is free to make his own assertions, according to patterns of significance to him. Thus, text has potential for meaning, which varies from reader to reader, and is influenced by his purpose and knowledge.

Chapter 12: Case studies of Ninth Grade readers, by Carol Hosenfeld.

Hosenfeld deals mainly with problem-solving strategies which the reader uses when he encounters unknown words. What kinds of things do people do? Strategies used in reading by high and low score students were compared. High scoring students tended to keep meaning of the passage in mind, read in broad phrases, skip unessential words, guess from context the meaning of unknown words. Poor readers tended to lose the meaning of the sentence decoded, read word-by-word or in short phrases with no skipping of words, and used the glossary for the meaning of new words.

Focusing on remedial efforts in reading ability, two case studies were reported. The first reader, a low scorer, was asked to compare her reading strategy with that of a successful reader and to list the differences. She did this satisfactorily, practised the strategies of the good reader with new reading tasks, and improved markedly.

The second case was that of a poor reader in the second language who resorted to the glossary continually rather than to context. The remedial work included teaching the reader how to guess the meaning of new words, e.g. by substituting a filler word 'something' for the new word and guessing its meaning from the rest of the sentence, also by seeing if the new word is like an English word and what would one expect the word to mean, etc.

Part of the reading problem of the subjects of the two case studies stemmed from the definition of reading underlying their classroom studies: that reading consists of carefully decoding phrase by phrase the material of the passage--which they did, to the detriment of reading fluency.

Chapter 13: Conversational investigations of reading: the self-organized learner and the text, by Sheila Harri-Augstein and Laurie F. Thomas.

In the conversational approach the aim is to enable readers to describe their own reading processes, and subsequently improve their competence. The experimenter (or tutor) and the subject cooperate in observing and measuring the continuously changing process of learning from a text. The reader is the observer of the internal events which lead to discovering the meaning, and the tutor (experimenter) observes and records external aspects of the other's behavior. The reader is involved in the observation and explanation. In this approach, readers are free to harness their own experiences of the process of attributing meaning into a personal model and description. The experimenter helps him to do this.

The Reading Recorder is described. It is a machine which produces a record of time, in minutes, for reading lines of text. Reflection on the record leads to conversational exchange as to what in the text at a certain place led the reader to pause and think, why were certain lines difficult to read, why others were easy to read, why the reading of some lines was repeated, etc.

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Chapter 14: Exploring the reading difficulties of second-language learners in Fiji, by Warwick B. Elley.

Elly views reading as a means of learning a second language. Eight surveys of Grades Six and Seven pupils revealed that large numbers of them were obviously incompetent in the English reading tasks of the classrooms; English is their weak subject. The problem can be partly attributed to the fact that pupils are learning in their second language, and that their teachers' use of English is not always of a high standard, and that English is not greatly used in the home. Also, pupils were not given opportunity to read texts whose individual words they had not previously learned, thus discouraging recognition of words through context. Elly says that students coming from schools with large libraries are better readers than those from schools with small or no libraries.

Notes for contributors: Readers are invited to submit letters of comment and/or publishable materials to the editor of NOL at The International Linguistics Center, 7500 W. Camp Wisdom Road, Dallas, TX 75236.

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Notes On Literacy

Vol. 17.3 1991

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NOTES ON LITERACY is published as an occasional paper by the Summer Institute of Linguistics, Inc., and serves their literacy program by sharing information of a practical and theoretical nature with the literacy workers of each Branch. Opinions expressed in this paper do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Address any inquiries, comments or manuscripts for publication to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

ISSN 0737-6707

STANDING ORDERS for this publication should be placed with:

International Academic Bookstore

Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Rd.
Dallas, Texas, 75236
U.S.A.

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HUMAN LEARNING: A LOOK AT THE DEFINITION, LEVELS, FACTORS AND PROCESSES

Evelyn Birch

Evelyn and her husband, Tom, joined WBT as translators in 1987. They are members of the Burkina Faso/Niger Branch. They studied French in Quebec City, and SIL courses at Trinity Western University in British Columbia, Canada, also at Eugene, Oregon and Grand Forks in North Dakota. Evelyn is at present center hostess in Burkina Faso.

I. Introduction
II. Definition of Learning
III. Degrees or Levels of Learning
IV. Factors Affecting Learning
V. Some Theories of the Learning Process
VI. Conclusion
VII. Bibliography

I. Introduction

The process of learning is no simple matter. Man has been trying for centuries to understand the human mind. It is interesting to note that there is no set mathematical formula, no precise definition of or explanation for learning--a reminder of the uniqueness of mankind versus the animal kingdom. This paper, therefore, can only basically define, in so much as we know, what learning is, and the different levels, as well as factors, that affect learning. With these will be included a brief section on some of the more recognized theories of the process of learning.

II. A Definition of Learning

To start, a definition of what learning is and what it is all about is required. This is not easy, as learning is an abstract process.

"Traditionally, many people have assumed that children learn language by *imitating* what adults say" (Clark, 1977:334). But children do *not* mimic everything, only the most recently said, stressed words. They leave out articles, prepositions and auxiliary verbs. Thus, imitation alone does not provide a complete way of learning that enables children to express sentences and ideas they have never heard of before (Clark, 1977:334-335).

Another traditionally accepted definition is one in which "learning is explained or described as an objective process or as results, measured from the outside. The question raised when evaluating learning has focused attention on *how much* the subject has learnt" (Pramling, 1983:33). This definition can also be applied to animals, if only measured results are called for. While it may be necessary to measure learning in such a way, this definition is not adequate. How often have we, for instance, rattled off an answer without really even knowing what we said?

It is this question that leads to another definition, that "... what is central is not facts, terms or signs learnt by heart, but the *understanding* of a message or an idea about the world around us, via texts or symbols" (Pramling, 1983:33) [emphasis added]. Thus, when a child truly learns his times tables, he not only can quote the table, but understands what the symbols say so that he can visualize the amount and the process.

However, an even further definition would say that "true learning is the ability to *apply* a skill or fact to real life" (Barbe, 1985:16). The child, then, who has truly learned the times tables would be able to *use* them within his world to solve problems.

Lester G. Anderson and Arthur I. Gates would say that, in its broadest sense, learning can be considered a process of adaptation (1967: A&G-IA). This is closely connected with behavioral changes which occur through modification by experience (Jung, 1968:6). As we are stimulated by the environment, we seek to respond. When that response does not suit or change the situation, we seek another response, until we are satisfied. Thus our behavior has changed; we adapted to the environment.

Ingrid Pramling did a survey with a variety of people, regarding the question, "What do you actually mean by 'learning'?" Below are the five most common answers, many of which have been discussed already.

1. Learning is the increase of knowledge;
2. Learning is memorizing;
3. Learning is the acquisition of facts, procedures, etc., which can be retained and/or used in practice;
4. Learning is the abstraction of meaning;

5. Learning is an interpretive process aimed at the understanding of reality (1983:37).

It is safe to say that these definitions all reflect aspects of learning--each being true to some extent, yet not complete. There is something, too, which influences these definitions, and that is degrees, or levels, of learning.

III. Degrees or Levels of Learning

Life if not one-dimensional, and so, neither is learning. The formation of habits requires a different type of learning from the memorization of facts. Understanding and forming complex ideas is on another level of learning than understanding and forming abstract ideas. For example, we learn through *experience* that ice is cold; with *little supervision*, we learn our alphabet; and with *sustained supervision* we learn things such as chess (Phillips and Soltis, 1985:5). "There seem to be different sorts of learning, some simple and some more complex, some involving the acquisition of knowledge, and others involving the mastery of skills" (Phillips and Soltis, 1985:5). It is apparent that as young children, we first learn through experience and 'graduate' to more difficult degrees of learning as we mature. However, we still learn on all levels throughout life. This is one reason why it is profitable to study learning, so education can be geared in such a way as to be helpful to the learner. Margaret E. Gredler Bell sums this up well when she says,

> In today's complex society, both learning and education take place on several levels, for different purposes, and in a variety of settings. Education includes informal study groups, preschool experiences, industrial training, and advanced graduate study and research (1986:324).

IV. Factors Affecting Learning

There are four major factors which affect the learning process and its outcomes. They are: motivation, attitudes, stress management, and learning styles and modes.

"**Motivation** is assumed to be an inner state of need and is a necessary condition if the learner is to engage in learning activity" (Anderson and Gates, 1967: A&G-IA). Anderson and Gates state that there are three essential elements in learning: stimulation from the environment; *incentives* (emphasis added) which when attained lead to satisfaction; a temporary blocking of response to help gain the

incentive (1967: A&G-IA). These incentives are motivations. For instance, a desert nomad would not be interested in learning to ski, since there is no *need.*

Often, however, even though there is a need, we may have no *desire* to learn. **Attitudes** greatly affect what can be learned. "If children fail in the beginning stages of learning, they develop negative attitudes and consequently learn not to enjoy the process of learning" (Barbe, 1985:193). If a child is constantly criticized while practicing a musical instrument, for example, chances are he will not enjoy that activity or the learning process and will give up, feeling he is a failure. Such attitudes are devastating, whereas praise causes enjoyment and fulfillment, good incentives to learn!

These two factors, motivation and attitudes, are closely connected with **stress management.** "Learning arises in a situation in which we do not as yet know or as yet are unable to achieve what we aim to do. It thus invariably involves uncertainty, some degree of frustration and disappointment" (Salberger Wittenberg, 1983:54).

Three young children were given the task of stacking blocks. One fellow tried and tried and out of frustration, became distracted and he gave up. He escaped the stress. The second child, in his frustration, became aggressive and angry, trying to control the situation. He became manipulative. Instead of checking to see what would cause the blocks to stay, he tried to force them. The third child, on the other hand, when frustrated, became curious as to why the blocks kept tumbling, and this led to his learning how to stack blocks (Salberger-Wittenberg, 1983:54).

Personality and learning styles play a significant part in the preceding example, but the point that how we handle stress will affect learning, is well taken.

Learning styles and modes also affect learning, and how these are used or not used greatly affects the outcome of learning as well.

Basically "children learn by seeing, hearing, moving and touching. For each child, one of these channels--*visual, auditory or kinesthetic*--is the one through which he or she learns best" (Barbe, 1985:13). For example, if a parent is aware that his child learns best by sight and not by hearing, then the parent can *show* the alphabet to the child while saying it, rather than only *verbally* repeating it.

These three modes are common to everyone, yet each person will use one or two more competently than the other(s). They tend to be subconscious, but they can be made overt, and can aid in learning (Barbe, 1985:16).

The *vision* modal involves sight and mental imagery; the person with this as a dominant trait learns best by seeing, as with the example above of the child. The *audition* modal involves hearing and speaking; the person with this strength learns best by hearing and discussing. The *kinesthesia* modal involves large and small muscle movements; this type of person learns best by doing (Barbe, 1985:16).

Analytic and holistic styles, also known as field-independent and field-dependent, are two other traits that affect learning.

Typically, field-independent people tend to be high in thinking-restructuring skills and tend to be very independent of others, and low in social skills. Field-dependent people are high in social skills and low in restructuring skills and independence. The analytic person is task-oriented, while the holistic person is person-centered; the analytic person sees things in 'black and white', while the holistic person looks at the total context (Garger and Guild, 1984). These styles are flexible and are not 'set in stone', nor usually extreme. People tend to swing and stabilize over time, using both. It is useful to know one's strength to gear learning in that way.

V. Some Theories of the Learning Process

It is valuable, at this point, to note briefly some of the major theories of the process of learning.

A. Classic theories

The oldest known theory is Plato's 'recollection' theory. He taught via stories and materials that were both interesting and understandable. However, this did not explain how a person learned something *new*, for Plato purported that 'learning depends upon the student having some prior knowledge or experience' (Phillips and Soltis, 1985:9). To answer the question of the student being able to learn something new, he said that "knowledge is innate, [and] it is in place from birth ... [and therefore] learning is the process of recalling what the soul had already seen and absorbed" (Phillips and Soltis, 1985:10).

This theory still did not answer why some learned 'better' or 'faster' than others. John Locke, in the nineteenth century, came up with his 'blank tablet' theory to answer this. He taught that infants are born with their minds 'blank', but with certain biologically preformed abilities that are dormant. Experiences are locked into the memory and these dormant powers of combination and abstraction help to build up ideas (Phillips and Soltis, 1985:13-14). This explains why underprivileged children are frequently low achievers. They lack basic concepts that come from experiences. For example, during the last fifty years, teachers were appalled that city children did not really know what a cow was, for they had seen them only as toys or pictures. To remedy this situation and give children equal experiences, and thus opportunities, programs such as 'Sesame Street' were developed (Phillips and Soltis, 1985:15)

B. Contemporary theories

Within the last century, new theories regarding the learning process have arisen.

The behaviorism theory followed the presentation of the theory of evolution and was strongly influenced by it. Following the belief that humans learn much the same as animals (Phillips and Soltis, 1985:21), learning was described as 'the result of actions of the environment on the learner' (Phillips and Soltis, 1985:7). Therefore, learning is a 'process of expanding the behavioral repertoire, not a matter of expanding the ideas in the learner's mind' (Phillips and Soltis, 1985:23). Pavlov's experiment with his dog seemed to be proof for this theory; learned responses were due to the environment and were 'built in' (Phillips and Soltis, 1985:24-25). This theory is also popular among pychoanalysts, and provides a basis of effective techniques in the treatment of antisocial behavior, autism and shyness (Phillips and Soltis, 1985:29).

Is all our learning and behavior only a product of our environment? The Gestalt theory would say that "learning is a process involving the attempt to think things out and then having 'it all come together" (Phillips and Soltis, 1985:35). This ability is present at birth and "is the physics of the nervous system that allows insight, and hence learning, to occur" (Phillips and Soltis, 1985:35).

Dewey's 'problem-solving' theory says that learning occurs "as a result of our 'doing' and 'experiencing' things in the world as we successfully solve real problems that are *genuinely meaningful* to us"

(Phillips and Soltis, 1985:7) [emphasis added]. This is an extremely important point, and ties in with motivation. We can learn without 'doing' and we often learn insignificant details (games such as 'Trivial Pursuit' attest to this), though not as well or often as those we are interested in.

Piaget's 'cognitive-science' approach is well demonstrated in many classrooms, essays and lectures. "Learning is facilitated by presenting the student with 'advanced organizers' or 'anchoring ideas'--ideas that are fairly general and fairly basic to the topic about to be learned" (Phillips and Soltis, 1985:52). In fact, our technology is so based. Electric appliances and machines could not exist had Benjamin Franklin not first discovered electricity.

Each of these theories does not adequately cover all that learning is. All of them contain and explain a portion of truth. Considering all that learning has been defined as, with its differing levels and factors, any theory can be applied to some extent to explain a certain aspect.

VI. Conclusion

Let us look back, for a moment, and consider the implications or questions regarding teaching and literacy in preliterate societies, that are raised by this discussion. How does all this affect literacy programs in such societies?

One must first ask, "What is my definition of learning? What do I expect from the students?" The answer will greatly affect how teaching is to be done. Methods of teaching need to be adapted to accomodate all aspects of one's definition and expectations. For instance, if learning is considered in part to be memorization, then what parts of the lesson, what things can be learned this way? If learning is in part application, in what ways can topics be applied?

Along with the definition, one should determine his theory of the process of learning--how is learning accomplished? Do the students have 'blank tablets' waiting to absorb new experiences which lead to learning? What sort of methods and programs could aid this process? Field trips, for example, may help. Does learning occur by thinking things out and having it 'all come together'? Does this mode work well with one's target group? Or, consider if greater learning occurs when the experience is genuinely meaningful to the students. What, then, would the curriculum consist of? If students benefit from

'anchoring ideas', how would materials be modified for this approach?

Furthermore, one must decide on what level of learning topics are to be taught. Are they that which can be learned by experience, or with more supervision? To expect students to learn complex and abstract ideas through experience alone may not be realistic. Children in many western societies receive extensive exposure to school-like activities through preschool experiences, educational games, parental instruction, and educational TV--all of which give them a head start in the educational process. Even though they begin with the same native intellectual capacities, children in preliterate societies will lack much of this preschool experience--a lack which must be compensated for in school activities. One must determine where children or adults are in their level of learning and work where they are at. Once this is determined, the question to ask is, "how to teach the material on the established level?"

Factors affecting learning must be dealt with. Are the students motivated? How can they be motivated? To decide this, one must discover the important, perceived needs and desires of the community. Teaching materials and methods should be adapted in order to provide that motivation.

Another question to ask is, "what are the attitudes towards learning, in general, or regarding specific topics?" If negative, how did they come about, and how can they be remedied? Remember, negative experiences can severely hamper the learning process.

It was noted that stress management was a factor in learning. One should discover how individuals and the community as a whole handle stress. Do they manage well? If not, then developing a program with relatively little stress may be crucial. One then needs to look at the program and see where stress may be caused and how it can be modified.

Most importantly, the learning styles and modes of the students need to be determined. Are the students analytic or holistic learners? Programs will be drastically different in approaches for each. It would be interesting to discover if whole communities and groups exhibit certain modes of learning, i.e. visual, auditory or kinesthetic, or only individuals. How could this be determined? Could teaching be structured to accomodate or incorporate differences in learning styles and modes? If it could be done, learning would increase and

be made an easier, more appealing and pleasant process (fostering good attitudes).

Perhaps it would be profitable for teachers and literacy workers to develop their own philosophy of learning and teaching with regard to the group in which they work. This should include all the aspects of learning discussed earlier and should attempt to answer the questions and problems of the above.

With a clear philosophy, it may be easier to determine the type of program and methods that will facilitate learning to the best degree in one's situation. Learning is a variety of phenomena--the context has to be taken into account (Pramling, 1983:33). Thus, one must assess his situation and determine the variety needed to meet the needs of the students.

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THE GOONIYANDI ORTHOGRAPHY

(The following paper outlines the change made from a linguistics-based practical orthography to one based on community input.)

Gooniyandi is an Australian language spoken by some one hundred adults living in communities between Fitzroy Crossing and Hall's Creek, including Yiyili and Bayulu, in the Kimberley region in the north of Western Australia. Most full speakers are over the age of thirty. Younger people often understand but do not speak the language. Today there is a shift in the region from speaking traditional languages to Kriol and English. Kriol is spoken as a first language by young Gooniyandi people. For more information on Gooniyandi people and their language see McGregor 1988, 1990.

David Street and Topsy Chestnut have been the main Gooniyandi-speaking decision makers in the forming of a Gooniyandi orthography. Linguists who have played a part in its development are William McGregor, who did the initial phonological analysis, Joyce Hudson and Therese Carr.

McGregor has worked on the language since 1980, during which time he has not only written numerous academic papers about the language but has also written Gooniyandi reading materials for school programs.

Joyce Hudson began her involvement with Gooniyandi in 1983 at Yiyili Community School where she was employed as a linguist to help develop the language program there. At that time she was working in a SIL project at Fitzroy Crossing, in a neighboring language, Walmajarri. (See Hudson: An orthography chosen by those who speak Gooniyandi, Nol 49:11.)

Therese Carr, linguist with the Kimberley Language Resource Centre (KLRC), began working at Fitzroy Crossing in 1990. The KLRC is an independent centre, managed by an Aboriginal committee and is committed to assisting communities in the maintenance of their languages in the Kimberleys. One way they do this is by assisting with orthography development, particularly for school language programs. With her involvement with the Gooniyandi people at Bayulu and the language program at Gogo School, Carr also became involved in orthography decisions.

WRITING GOONIYANDI, 1990 UPDATE

Therese Carr

Therese Carr graduated from the University of Western Australia , BA Hons, in 1987. Since then she has worked on short contracts for the Kimberley Language Resource centre (KLRC), with speakers of ten different languages in the Kimberleys. Projects have included the recording and transcribing of stories and oral histories, building up word lists and working with writers on practical orthographies.

I. Introduction

In 1983 two Gooniyandi Aboriginal people met with a linguist to choose a spelling system that could be used in a community school's language (revival) and literacy program. Seven years later, the two met again to review their orthography and make some changes. This paper discusses the history of Gooniyandi orthography development, particularly giving attention to the factors that led the users of the orthography to modify it at that 1990 meeting.

The first orthography for Gooniyandi was developed by William McGregor and was almost identical with that referred to as the South Kimberley Orthography (Hudson and McGregor 1986). The only difference was the addition of **nh** and **th** and the deletion of **ii** and **uu**. McGregor used this orthography in written materials for the Yiyili Community School and for Gooniyandi examples in his technical writings on the language.

The second orthography came into being in 1983 when Joyce Hudson encouraged two Gooniyandi speakers to select an orthography for use in the school that would be easier for people literate in English to use without any special training. The account of how the orthography was chosen and the implications of some of the choices of symbols is given in the paper by Hudson, NOL 49:11.

The orthography was tried out in the language program at Yiyili school during 1983 and again during 1987-1988. No major problems or issues resulted from the trial. In 1988 KLRC published a primer written by McGregor using the orthography. The use of this primer did not generate responses or comments on the orthography by users of it.

The third orthography came out of the 1990 meeting involving Street, Chestnut, Hudson and Carr. It reflected modifications that were already being made by a few writers of Gooniyandi.

II. Orthographies for Gooniyandi

In the following table the three orthographies have been written side by side to highlight the differences that have developed[1]. Each group of three symbols, reading from left to right, represents the first, second and third orthographies respectively.

Orthographies for Gooniyandi

Consonants

	bi-labials	lamino-dentals	apico-alveolar	apico-post-alveolar	lamino-palatal	dorso - velar
stops	p b b	th th th	t d d	rt d d	j j j	k g g
nasals	m m m	nh nh nh	n n n	rn n n	ny ny ny	ng ng ng
laterals		- lh -	l l l	rl l l	ly ly ly	
tap/flap			rr d rr			
glide	w w w			r r r	y y y	

Vowels

	short		long	
	front	back	front	back
high	i i i	u oo oo		
low		a a a		aa ar aa

Over the years following the 1983 orthography choice, though it was never formally stated or acknowledged, it became known that spelling differences had developed among the few Gooniyandi writers. Another meeting between Topsy Chestnut and David Street was held in June 1990 to review the 1983 orthography. Some changes were made and the 1990 orthography resulted from this meeting (see table).

The 1990 community orthography uses distinct symbols for the alveolar stop **d** and the tap **rr**. This seems to reflect a desire to distinguish these two sounds in the orthography. However, the apico-post-alveolar (retroflex) stop, nasal and lateral are no longer distinguished from the alveolar series (see table). Hudson (1984) has already observed that younger Gooniyandi people don't always perceive this distinction and it may be in the process of being lost in their speech. **lh** was dropped because it was not used by writers.

The selection of **aa** to represent the long low vowel solves the problem of ambiguity in the second orthography when **ar** represented both the long low vowel found for example in the verb root **bar [baa]** 'to call out', and the sequence short low vowel immediately followed by a retroflex glide, for example **bar [bar]** 'to climb up'.

III. Community writing 1983-90

Chestnut and Street have always been the most confident Gooniyandi writers. However, neither has had much cause to write more then individual words and a few sentences, as the only domain for written Gooniyandi was in the school revival program.

Since 1985, Street has been employed as an Aboriginal Education Worker at Go-go School, the primary school that services his community, Bayulu. He teaches Gooniyandi language and culture to the children there. The program is primarily an oral one and literacy work tends to be restricted to labelling objects and body parts and the writing of simple songs and illustrated stories. For this work, Street had evolved a variation of the 1983 orthography. His writing was influenced by two things. One was his English-based intuitions which caused him to see **p** and **b**, **k** and **g** as interchangeable and the retroflex consonants as not needing to be marked. The other was his knowledge and experience of the South Kimberley Orthography which, for example, uses **rr** for the tap and **aa** for the long low vowel.

Up until 1990, Chestnut only occasionally wrote Gooniyandi. She was sometimes called upon to write words for teachers and community workers as she contributed to in-services and orientation days for non-Aboriginal government workers in the Fitzroy Crossing non-Aboriginal area. Early in 1990, while participating in a translation workshop, she demonstrated an ability to use the 1983 orthography consistently as she translated a children's story from English to Gooniyandi.

Early in 1990, both Street and Chestnut were more deeply involved in writing as they checked and added words to a Gooniyandi Wordbook. Both writers have now begun to write longer texts.

Increased interest in the Gooniyandi orthography can be attributed to several recent events:

1) Late in 1989 a Gooniyandi speaker and artist strongly suggested that spelling issues needed to be sorted out before any more printing or publication of Gooniyandi materials took place. Chestnut and the KLRC took up this suggestion and it was decided that before too long a big meeting should be called so they could discuss spelling and other language issues.

2) This year a new opportunity for Aborigines interested in learning to write their languages arose when a course designed to train Aboriginal language workers became available in the region.

3) The KLRC is currently preparing Gooniyandi storybooks and a wordbook for publication. Judging by the current level of interest in the wordbook, it seems certain to be used as a standard reference for teachers and others desiring to write Gooniyandi words. The book will be inexpensive and attractively produced.

IV. The 1990 meeting

The idea of a big meeting of Gooniyandi people was passed on to me when I took the position of KLRC linguist in Fitzroy Crossing early this year, but for a number of reasons it did not eventuate. However, I soon found myself in need of guidance as to how to write Gooniyandi. My own involvement in various projects where the language was being written made me acutely aware of the need for standardization, at least between the two main Gooniyandi writers.

I consulted with Joyce Hudson and she agreed to attend a meeting with Street and Chestnut. Both were paying lip service to the 1983 orthography, yet each was writing in his own way. It was thought that Hudson's attendance might help to release the two from the 1983 statement.

The 1990 meeting was attended by Chestnut, Street, Hudson and myself. It was informal, with no predetermined structure. We began with discussion of the work we were doing and the different ways Gooniyandi is being written. We looked at samples of Street's work and that of his students, Chestnut's translation and some stories

transcribed by McGregor (1982). Hudson suggested that we each attempt to write words containing problem areas.

This we did and decisions were made in the following way. Where Chestnut and Street spelled words the same way, we agreed to use that spelling convention. Where they came up with different spelling, e.g. the use of **d** versus **rr**, representing the tap, they reached a consensus in each case. Usually it was after trying out a few more words with the same phoneme.

At the conclusion of the meeting, although a satisfactory consensus had been reached, it was decided that another meeting with more Gooniyandi people still needed to take place, so that they could be made aware of the changes, have a chance to voice their opinions and endorse the 1990 orthography. In the light of this intention and in view of the potential for more changes as writers learn more about writing Gooniyandi, the 1990 orthography should be regarded as provisional.

Accordingly no materials have yet been published in this latest orthography. There are, however, encouraging signs that it is acceptable to at least one group of speakers. A draft version of the Gooniyandi Wordbook in the 1990 orthography has been well received by another two speakers who are English literates. One commented, "It's easy to read the words. Yes, it's written right."

Footnotes

[1]In 1986 McGregor proposed another orthography for use in linguistic publications. This orthography with rationale for choices of symbols is discussed in McGregor 1986.

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A TRIBUTE TO THE EDITOR

For the past four years, NOTES ON LITERACY has been uniquely blessed in having Dr. Olive Shell as its editor. The time comes however, for her to return to her home in Toronto, Canada; she will be greatly missed.

Dr. Shell joined the Summer Institute of Linguistics in 1944 when the organization was still in its infancy. In 1946, as a member of SIL's first group of linguists to study Peru's Amazonian languages, Olive began to analyze and to learn to speak the Cashibo language.

Utilizing scheduled leave time, Olive earned degrees in linguistics at the universities of Indiana and Michigan. In 1961 she received the Doctor of Philosophy degree from the University of Pennsylvania. She also frequently taught various courses, from beginning to advanced, at summer SIL courses. She still lectures when asked.

But her real interest lay with the Cashibos in Peru. Helped by native speakers she translated the New Testament into that language even while engaging in extensive literacy work for this and other jungle groups. Her work was later recognized by the Peruvian Department of Education when it bestowed upon Dr. Shell its highest award for distinguished service to the Indians of its jungle area. With the work among the Cashibos completed, Olive then went to West Africa where she served as literacy consultant in Cameroon for nearly six years. Her experiences with the Cashibos were shared with others.

Unwilling to "call it quits" and enjoy life with family and friends in Toronto, Olive came to the International Linguistics Center in Dallas in early 1987. Here she has ably filled the post of editor of NOTES ON LITERACY. Of course this wasn't quite enough work for this energetic lady, so she volunteered as a docent at SIL's International Museum of Cultures.

We reluctantly bid farewell to Olive Shell, one of NOL's most diligent editors. But never can we say a true "good-bye" to such a valiant colleague and sister. We'll hear more of Olive's doings as she goes back to Canada. A spirit such as hers never really retires.

Thank you, Olive, for a job much more than just well done.

Margaret Wendell, for the
International Literacy Department

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COMMUNITY INVOLVEMENT IN ORTHOGRAPHY DEVELOPMENT: DEVISING AN ORTHOGRAPHY FOR BUNUBA

Matthew Wrigley

Matthew received a BA Honors degree from the University of Western Australia. He has been working as a linguist with the Kimberley Language Resource Center in Halls Creek in the northwest of Western Australia for the past two years. He has worked with Jaru and Kitja speakers especially, helping them produce materials in their languages, and has assisted speakers of six other languages to produce word lists.

This is a report on a three-day workshop run by the Kimberley Language Resource Center in conjunction with Junjuwa Aboriginal Corporation to devise a working orthography for Bunuba. The workshop took place at Junjuwa community in Fitzroy Crossing on the thirteenth, fourteenth and fifteenth of November, 1989. Bunuba is a language spoken by fifty to a hundred people around Fitzroy Crossing in the Kimberley region of Western Australia (McGregor 1988a:25). The workshop attempted to involve as many Bunuba people as possible in the process of devising an orthography, thereby making greatest use of intuitions deriving from their English literacy, if any, and developing the strong impression that this was *their* orthography.

Orthography Development in the Kimberley

In the survey of languages undertaken during the Kimberley Language Support program, Hudson and McConvell (1984) recommended two broad orthography types for use in the Kimberley. In fact, the KLRC has not adopted the recommended orthographies, but rather works with particular communities assisting them to develop their own orthographies. There are four main reasons for this change of policy:

1) People identify with an orthography which they had a hand in developing.
2) Intuitions based on English literacy are exploited to a greater extent.
3) Interference due to existing English literacy is reduced to a minimum.
4) People take responsibility for their own writing system and gain a better understanding of how it works.

There remains a problem, however. "How do you give nonliterate and semiliterate people a choice in writing a yet to be written language?"

The Bunuba Situation

Bunuba people have had only intermittent contact with linguists since the late 1930's when Arthur Capell collected a large corpus of sentences and text. Alan Rumsey has worked on Bunuba intermittently since 1976. In 1980 he produced a manuscript called A *brief tentative description of Bunuba*, and in 1984, in response to a request from the principal, left a word list, tape and practical orthography (see chart) with the Fitzroy Crossing school which appears not to have been used. In 1987 he worked with June Oscar in particular commenting on her writing of Bunuba for the script of a movie about Jandamarra (Pidgin), a famous Bunuba warrior (Alan Rumsey--personal communication).

Joyce Hudson had some contact with June Oscar who continued to collect and write down Bunuba words, and Olive Bieundurry, with a view to establishing an orthography. There have been no sustained attempts to establish a school or literacy program in Bunuba.

Pressure increased through the late 80's for a working orthography for Bunuba and a Bunuba literacy program. Barbara Jones of the KLRC and Joyce Hudson suggested an orthography workshop.

Structure of the Workshop

The basic plan of the workshop was to team English literate Bunuba people with nonliterate, proficient speakers. This was so that older people who did not know how to read and write could be involved and to allow younger literates to check their pronunciation and in doing so recognize the authority of the older speakers. As it turned out, the older people got much more involved than this. The younger literate people assisted them in practising writing each word and the workshop did not continue until everyone had made an attempt at writing the word in question.

The workshop was widely advertised to Bunuba people in Fitzroy Crossing. People present at the workshop were Therese Carr (KLRC linguist then working in Derby, assisting) and Matthew Wrigley (the writer), June Oscar, Patsy Bedford, Eric Bedford, Selina Middleton, Johnny Marr, Billy Oscar, Charlie Kadjibut, Ted Beharrell, Warambu,

Jimmy Green, Mona Oscar, Rita Middleton, Jamie Marr, Molly Jalakbiya, George Leopold and Susan Hode. We had visits from Ivan McPhee and Kevin Oscar on the Tuesday and the Wednesday. On Tuesday Joyce Hudson brought Justin Overman and Pam Moss from the Ministry of Education for a short visit. Five of the Bunuba people present were literate in English, and some of these had been writing Bunuba for years using a variety of systems.

The workshop proceeded, more or less, with the author suggesting a Bunuba word that every group should try to write down as they thought best. We then compared the various versions on the blackboard, discussed their pros and cons and attempted to reach some consensus as to which was best. We then added the agreed-upon symbols to a tentative Bunuba phoneme chart hung on a wall next to complete charts of Jaru, Walmajarri, Kija and Gooniyandi, to allow comparisons.

I anticipated that there might be some irreconcilable differences between groups, so I made a 'Language Ballot Box' and ballot papers to enable people to choose between competing versions. I also hoped that the ballot box would add a game-like quality to the workshop and give a strong impression of democracy in action. I would not use this ballot box for similar workshops in the future, and indeed it was discarded after its first use. This happened because the groups were good at coming to an agreement (**dd** vs **rr** was the only case where no compromise was reached) and because I wanted to restrict the voting to literates in each group, which would have caused unwanted divisions of privilege amongst the participants. So the ballot box was discontinued.

Everyone was provided with pencils, pads and erasers. Later on people made for themselves letter cards so they could study the options for writing a particular word more easily. I did not think of providing these, but I certainly will in other workshops of this type.

Conclusions

The KLRC would appreciate input from anyone with ideas on methods of giving people with little literacy choices in selecting and developing a writing system for their own language.

The Bunuba Wordbook was produced in draft form using the new orthography. Copies are now circulating in Fitzroy Crossing for comment. Four Bunuba men who participated in the production of the Wordbook and in the Workshop have enrolled in Pundulmurra

College's Certificate in Aboriginal Language Work and are presently learning to use the system they designed.

Appendix: The Bunuba Orthography

Vowels

a or **ar**	Low front vowel. Like the **u** in **but** or the **ar** in **hard**. This is the sound in the Bunuba words **jawi** (face), **limba** (police) and **giriwa** (wind).
i or **ee**	Mid to high front vowel. Like the **i** in **plt**. The sound in the Bunuba words **gilili** (shoulder blade) and **nyanyi** (mother's brother).
u	High back vowel. Like the **u** in **put** and the **oo** in **boot**. The sound in the Bunuba words **gau** (lungs), **jugu** (son) and **muay** (camp).

Consonants

d	Apico-alveolar stop. Like the English sound in **dog** and **bat**. The sound in the Bunuba words as in **buda** (back of neck) and **diadia** (mudlark).
n	Apico-alveolar nasal. Like the English **n** in **nut**. Like in the Bunuba words **nawan** (cave) and **jinali** (spear).
rr or **dd**	Apico-alveolar trill or flap. Like the **rrrrrr** in a cat's **purrrrr**. The sound in the Bunuba words **gurra** (stone ax) and **rarrga** (stone, money).
l	Apico-alveolar lateral. Like the English **l** in **lock**. The sound in the Bunuba words **limba** (police) and **wila** (armband).
b	Bilabial stop. Like the English **b** in **boat** and **big**. The sound in the Bunuba words **limba** (police) and **buda** (back of neck).
m	Bilabial nasal. Like the English **m** in **meat**. The sound in the Bunuba words **mulu** (eye) and **gurama** (man).

w	Bilabial glide. Like the English **w** in **w**ait. The sound in the Bunuba words **j**awi (face) and **w**auli (frilled neck lizard).
th	Lamino-dental stop. A bit like the English **th** in **th**at. You put the tip of your tongue between your teeth. The sound in the Bunuba words **th**arra (dog) and **th**arru (upper back).
nh	Lamino-dental nasal. No sound like this in English. You put the tip of your tongue between your teeth and make a **n** sound. The sound in the Bunuba words **nh**i (his, hers) and **nh**a (sugarbag).
lh	Lamino-dental lateral. No sound like this in English. You put the tip of your tongue between your teeth and make a **l** sound. The sound in the Bunuba words mi**lh**a (meat) and mirri**lh**ini (rainbow).
j	Lamino-palatal stop. Like the English **j** in **j**am or the Bunuba words **j**awi (face) and **j**inali (spear).
ny	Lamino-palatal nasal. Like the sound in the word o**ni**on. The **ny** sound in the Bunuba words **ny**aan**y**i (mother's brother) and wi**ny**i (neck).
ly	Lamino-palatal lateral. Like the **lli** sound in the English word mi**lli**on and the **ly** in the Bunuba words wa**ly**arra (sand) and jibi**ly**ugu (duck).
d	Apico-domal stop. Like the **d** or the **t** sound when a North American says car**d** or car**t**, the tongue curls back a little more. As in the Bunuba words ma**y**a**d**a (pelican) and gu**d**a (guts).
rn	Apico-domal nasal. Like the **rn** when a North American says ba**rn**. As in the Bunuba words ma**n**a (older brother) and ba**n**di (arm).
rl	Apico-domal lateral. Like the **rl** when a North American says gi**rl** or cu**rl**. As in the Bunuba words gi**l**iy (blood) and ma**l**arri (bark).

r	Apico-domal rhotic. The same **r** sound as in English **r**ed and o**r**ange. As in the Bunuba words in **g**u**r**ama (man) and **w**u**r**a (nose).
g	Velar stop. The same sound as the English **g** in **g**oat or the **k** in s**k**ill. The sound in the Bunuba words **g**u**r**ama (man) and ju**g**u (son).
ng	Velar nasal. The **ng** sound in the English words si**ng** and bo**ng**. The sound in the Bunuba words yu**ng**gu (scrub) and **ng**alana (death adder).

A SURVEY OF THE AESTHETICS OF THREE CULTURAL GROUPS

Douglas Dawson

Douglas Dawson is a professional artist. ... He was interested in going to Suriname to lead a workshop in training various indigenous persons in the basics of art -- anatomy drawing with ink and concepts of illustrating. He also made a survey among various racial groups in Suriname to discover how they feel about books, and what a 'book' is to look like. The following is an abridgment of Mr. Dawson's report on the survey.

The purpose of the survey was to answer some fundamental questions about book design for three language groups in Suriname: the Bush Negro, the Creole and the Hindustani. The assumption was that there are differences between cultures, which influence what in each culture is judged to be visually attractive or appropriate.

The Bush Negro survey comprises a survey of the Saramaccan and the Aukanner groups. The two groups are different in language, but similar in culture. Most of the Bush Negro live in small jungle villages and are somewhat isolated from outside influences, other than radio. They are marginally acquainted with books and western European culture.

The Creole people are primarily city dwellers, and most live in or around the capital, Paramaribo. They have been exposed to many western influences, such as television. They have seen many books, including Bibles, and have spent more years in school than the Bush Negro. Both the Bush Negro and the Creole are descendants of African slaves brought to Suriname to work the plantations. The Bush Negro are descendants of slaves who escaped into the jungle, while the Creole are descendants of slaves who did not escape, and whose generations were raised under the Dutch.

A few of the Hindustani are Moslem, but most are Hindu; their culture is closely tied to the Hindu religion. The Hindustani were brought in to work the plantations after slavery ended.

Some of the issues covered in the survey (as suggested by C. Dyk and Dr. W. J. A. Pet) were:

- Should shading be used in illustrations?
- Would the different language groups vary as to how much detail they preferred in an illustration?
- Would the different language groups reject any degree of complexity in favor of simplicity?
- What size of book would each language group consider most desirable, 8 1/2" X 11"? 6 1/2" X 8 1/2"? 4 1/4" X 6 1/2"?
- Given a particular size of book, what size and style of type would each group think most desirable? Since most of the books already in print were 6 1/2" X 8 1/2", and guidelines had been given to help in selecting the size of type, either 10 point or 12 point would be acceptable. The question then was, would the group prefer larger or smaller type?
- If the group saw the difference between Dutch justified and Swiss justified type, which would they prefer?
- Which style of binding would they prefer: center stapled or a square glued binding?

Mr. Dawson reports on interviews with SIL members, other researchers and members of the language groups, regarding indigenous art work. For the actual survey, he constructed four books 6 1/2" X 8 1/2" with gray covers. Questions about illustrations or lettering styles were placed inside the books, e.g. Question No. 1, about lettering size and style, each book contained as its first page, one of four different samples of lettering. Question No. 2 required the participant to select an illustration from among four possibilities, each book containing one of the four illustrations. For questions involving book covers, covers were made so they could be slipped on over a 6 1/2" X 8 1/2" book, from which choice could be made. For the question involving style of binding, two books of equal size and number of pages were prepared, one with center stapled binding and the other with a square glued binding. For the questions regarding size of book, three books of different sizes were prepared. They were similarly bound and had uniform gray covers.

Mr. Dawson describes in some detail the persons interviewed in the different villages throughout the area.

During the actual survey, the first question was regarding pages of different kinds of type. In general, the Bush Negro and the Creole preferred 12 point Swiss (sans serif) over 10 and 12 point Dutch (with serifs) and 10 point Swiss (san serif).

12 point Swiss (sans serif):

Tawlem doffet ul nirch smay irdicgum ber cehilkem brep tozne. Jnma puloxt ris wyomone gakil oe monnzke, ym grofn duw kirewij exespdatate ul vehnd etsue in dasgiette.

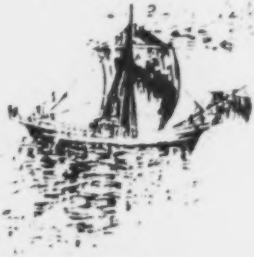
Questions 2 and 6 were to determine if more or less detail is desired in an illustration.

Question 2, Which picture of a boat do you like best? (detail scale). The choices varied according to amount of detail presented. Among the Bush Negro and the Creole, there was preference for greater detail in the picture. However, the writer says that the question was probably invalid because there were too many variables. The response may have had more to do with drawing style than with detail.

2. Which picture of a boat do you like best?

A) least detail

B) a little detail



C) more detail

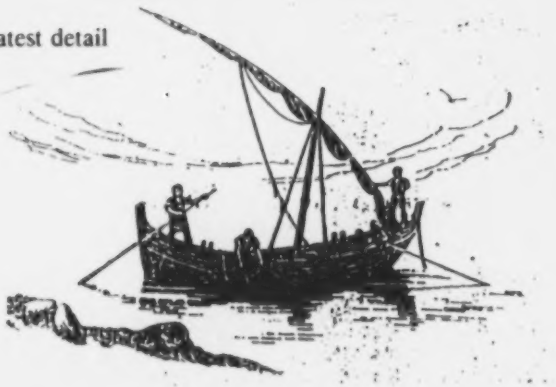
D) greatest detail

Question No. 6. Which picture of a boat do you like the best? (detail scale) Here two choices were offered as to amount of detail. In both the Bush Negro and the Creole cultures there is preference for greater detail in the pictures, with the picture having the greater detail scoring the higher -- although the Bush Negro culture is less decisive on this point. The difference between the two cultures may be because the Bush Negro have had less experience with illustrations, and have seen fewer pictures than the Creole.

6. Which picture of a boat do you like best?
(detail scale)

A) least detail

B) greatest detail



Question No. 3 was regarding pictures for a storybook, the choices being 1) Biblical illustration of city people, 2) city life: a woman standing at a store counter, 3) illustration of early plantation life, 4) photo of a Bush Negro child. The Bush Negro chose the Biblical illustration of people in Egypt and the illustration of Bush Negro life equally; for the Creole there was preference for the Bible story illustration. The Hindustani preference was for an illustration of a Hindu holy man sitting under a tree.

However, Mr. Dawson's comment is that this question, like Question 2, has too many variables, such as style, subject matter, content, etc. The question was written to see if there would be any cultural resistance to traditional Bible illustration, and to see if it would be better to illustrate the Bible by using people and places from the culture. The fact that a fair number of people from all three cultures picked the Bible illustration would seem to indicate either that they are familiar and comfortable with Bible illustrations, or that they chose it because they thought they were expected to. The results are open to interpretation.

3. Which picture would you choose for a storybook?

A) city life: a Biblical street scene

B) city life: a woman at a store counter

C) early plantation life D) a Bush Negro child

Questions Nos. 4 and 7 were based on two sets of visuals with the same questions. The pictures were based on a complex Bible illustration, using it for a middle choice, B. For choice A, the author whited out part of the illustration to simplify it. To make the most complicated choice, C, he added objects and people to the original illustration. The middle illustration, B, represents the artist's concept of an acceptable level of complexity.

Most of the Bush Negro chose B. The majority of the Creole chose A, but nearly as many chose B. Both groups rejected C, the most complicated and confusing. The author's conclusion is that illustrations that seem confusing to 'us' will probably seem confusing to the Bush Negro and the Creole as well.

4. Which of these pictures do you like the best?
(clarity scale)

A) clearest

B) not quite as clear

C) most confusing

Question No. 7 was designed using the same methods as in Question 4. The results of both tests show a clear rejection of the most complex illustration. The Hindustani surveyed rejected the most complicated illustration and selected the clearest.

Question No. 5 was 'Which picture do you like best?'. This question was included to test the assumption that it is best to avoid shading because it confused people who had had less experience with illustrations. The author says he was unable to construct this question so that shading would be the only variable. Lacking this he tried to use four Bible illustrations, all of which contained an

occasional donkey or camel. The pictures varied from complex line drawings at one end of the scale to complex with shading at the other end. The shaded drawings were clearest. Of the three line drawings, one had just a little shading. If participants chose the shaded drawing, it would be clear that the shading was a significant factor.

The four pictures represented a clarity scale. The four categories were: clearest, with shading; little shading; no shading; most confusing, with no shading. The Bush Negro preferred the clearest (with shading), but almost as well the picture with no shading; the Creole greatly preferred the clearest (with shading).

5. Which picture do you like best?
(clarity scale)

A) clearest (shading)

B) little shading

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C) no shading

D) most confusing
(no shading)

The author says that is would have been better if all four choices had been difficult to achieve because as shading is added, the element of line is obscured, so that there would have been two variables: shading and line. While there is the possibility that both groups were responding to some other variable, the author believes that they were responding to shading so he considers the results reliable.

Questions Nos. 8 and 10 were about the size of books. Question No. 8 was, 'Which of these books would you give as a gift to a friend?' The Bush Negro selections seemed to indicate a lack of experience with book ownership, their responses being indifferent to the question. The Creole preferred 6 1/2″ by 8 1/2″ format, which pertained only to adult books, since most of the respondents were adults.

Question No. 10 was 'Which of these books is for children?'--according to size. The choices were: 4 1/4″ by 6 1/2', 6 1/2″ by 8 /2″ and 8 1/2″ by 11″. Bush Negro prefer children's books to be large, 8 1/2″ X 11″. The adult Creole prefer them to be 6 1/2″ X 8 1/2″, with the larger size 8 1/2″ X 11″ almost as popular, but children preferred the smallest size, 4 1/4″ X 6 1/2″. This raises the question, should children's books be designed for children's or adults' tastes? The answer may depend on who is buying most of the children's books, children or adults.

Question No. 9 was 'Which of these styles of lettering would you prefer for an ordinary book (title)?' The choices were: bold block lettering, an ornate script, or a lettering style meant to imitate the religious script used in Hindi religious writing. The majority of the Bush Negro chose the ornate script, though almost as many chose the bold, block lettering. The Creole clearly chose the block lettering, perhaps because they were more familiar with the officially approved lettering style. Also the Hindustani who participated approved of the block style lettering.

Question No. 13 was 'Which of these styles of lettering would be best for a religious book (title)?' The choices were (as in Question No. 9) bold block lettering, an ornate script, or a lettering style meant to imitate the religious script used in Hindi religious writings. The challenge to the author was, could he create a readable script which looked like traditional Hindi religious writing, and if he could create such a script, would the Hindustani select that script for religious writings. (Question 9 served as a control for this question.)

The Bush Negro selected the ornate script for titles of religious books, as did the Creole, though among the Creole there was considerable preference also for block letters. It seems clear that both groups associate ornate script with religious writing. It would therefore be commendable if titles for religious books utilize this style. The Hindustani who participated also preferred the 'mock-

Hindi' script for titles of religious books. However, those who were surveyed were Hindus; perhaps Moslems would react differently.

Question No. 11 pertained to binding, the choices being center stapling or glued squared-off binding. The question was, 'Which of these books is best?' In the test samples, the center stapled book was made in the print shop, just like any other center stapled book. The book with the square glued binding was not prepared in the usual way, but consisted of some inner pages glued together, with the cover loose so it could be slipped on or off. After the Bush Negro survey had been completed and the Creole survey half completed, it became obvious that people were not making their choices on which binding looked best (which they were expected to do) but on which binding had a firmly attached cover. Thus those surveys were unreliable. When the gray cover was glued on to the pages, the results indicated that the Creole preferred a square glued binding.

Question No. 12 was, 'Which of these covers is best for a regular book?' The choices were two types of drawings and a photograph of two Bush Negro women. The drawings were based on tracings of the photograph, the second drawing having less shading than the first one. The question was included to test the response of Bush Negro to photographs. (The Creole were surveyed for the purpose of comparison.) It was thought that photographs would not be good for Bush Negro books because the readers would be preoccupied with who the people in the photo were; thus they would miss what the picture was supposed to illustrate. Another opinion was that Bush Negro would not accept photographs or illustrations which cut the person off so that the whole person is not visible.

During the survey among the Bush Negro, *no one* asked who the people in the photograph were. They consistently chose the photograph over the illustrations. Nor was there concern because part of the left figure was not visible. The Creole, however, rejected the use of the photograph.

Some questions may be asked: Is the response to the photograph a consequence of the subjects in it being Bush Negro? Would the results have been the same if the subjects had been two Creole women? How would the Bush Negro have responded if the photo had been of Creole? Another survey may be needed to clarify such issues!

12. Which of these covers is best for a regular book?

A) drawing with shading

B) drawing with no shading)

C) actual photo of two Bush Negro women

(The example labelled, 'actual photo,' is here a photocopy as the original photo was not available to the editor at the time the summary of the book was produced. The reader will have to draw upon his own experience as to what a true photograph looks like.)

Questions No. 14 through No. 18 concerned book covers, which can be described in terms of four different properties: hue, value, intensity, and texture. Hue indicates color; value or tone describes how dark or light the color is; intensity describes how bright or dull the color is. (A very bright color may be described as fluorescent; dull colors may be described as browns or grays.) Texture describes the surface qualities: leather-like (leatherette), glossy (shiny), mat (dull).

The color survey was not complete, in that the full range of values from dark to light, and of brilliance from dull to fluorescent was not available in cover stock for every color. The survey covered responses pertaining to stock which might be available. Question No.14 pertained to cover choice.

The Saramaccan preferred bright, intense colors with shiny surfaces. They rejected the light values with mat surfaces -- which includes all the covers available in the print shop. The Aukanner showed a preference for bright colors with shiny surfaces, and were least interested in leatherettes. The Aukanner did not choose blue, although blue could have been expected as the choice because the Aukanner like to use a middle value of bright blue for painting designs on their homes and paddles.

The Creole people preferred darker colors, especially dark, shiny, intense colors. The few Hindustani who participated showed a preference for red and red leatherettes, also orange.

Question No. 15, being a variation of No. 18, was omitted. Question No. 16 was, 'Choose five covers which would be good for a religious book.' Of the Bush Negro, the Saramaccan chose dark dull leatherette covers. Brown leatherettes were chosen more frequently than the gray or blue ones. The Aukanner chose black and white, closely followed by two dark leatherettes and three dark shiny bright colors. (White had not been included in the Saramaccan survey.) The Creole chose dark, dull leatherettes. (Mr Dawson strongly recommends that the dark leather-look cover be used for Creole published religious material.) The Hindustani chose red, reddish brown, and white, followed by another reddish brown.

Question 17 was 'Choose five covers you don't like.' (It may be more important, with some language groups, to avoid certain colors, than to use certain colors.) Of the Bush Negro, the Saramaccan chose pink and middle values of yellow-browns as not liked. (Pink should be avoided with this group.) For the Aukanner, yellow-browns, orange and orange-brown are the colors they least liked. Both Bush Negro groups rejected yellow-browns. So it would be good to avoid this color with both groups. For Creole and Hindustani, there isn't much agreement as to what colors are disliked.

Question No. 18 was 'Choose five covers which would be good for children's books.' Bright colors with shiny surfaces were the top choices for all the groups surveyed. Red was the favorite color of all the groups, followed by other bright colors. There seems to be universal agreement that children's books should be bright and colorful.

Mr. Dawson offered some criticisms of the survey. He thought that he had tried to accomplish too much in too limited a time. It was difficult getting participants because the survey was too long and taxed their patience. To conduct a series of smaller surveys would have been better -- which is actually what was done. After the survey of the Bush Negro and half the Creole, the survey was broken up into smaller sections and treated like a series of smaller surveys.

Question No. 2 should have been eliminated, as containing too many variables and was not reliable. There were duplicate pairs: #2 and #6, #4 and #7, #9 and #13. The worse of each pair should have been eliminated.

Question No. 3 should have been constructed as two illustrations of the same story, both pictures made in the same style and with the same arrangement of people and buildings. The difference would be that one illustration would have people and buildings typical of Bible times, the other people and buildings characteristic of the language group being surveyed. Both would illustrate the same parable. The testee would state which illustration he liked best.

Mr. Dawson closes his report by offering recommendations and speculations suggested by the survey, e.g., use mock Hindu script for Bible literature. Other suggestions for adaptations involve the fact that Hindustani like plays and stories that begin with, 'There was a king and a queen ...' This suggests the possibility of writing plays for the Hindustani with a Christian message; the number of stories in the Bible which might begin with, 'There was a king and a queen' are many. They also like plastic flowers to use at religious ceremonies such as weddings. This suggests the possibility of publishing a poster with Scripture at the bottom, suitable for hanging in one's home. The flower observation raises the question of whether the Hindustani would like flower designs on book covers or even on the inner pages of their books.

The Saramaccan of the Bush Negro are used to calendars with cross-stitch patterns. Cross-stitch patterns could be worked out by hand on graph paper or a computer program could be created which would generate cross-stitch patterns. The Aukanner of the Bush Negro have ancestor shrines consisting of a pole stuck in the ground and shaped like a 'T'. This imagery sounds strikingly like the cross. Perhaps there is a way to take advantage of this similarity.

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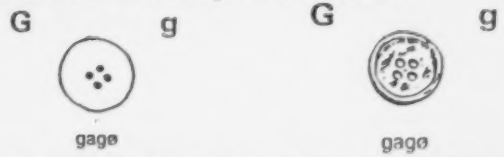
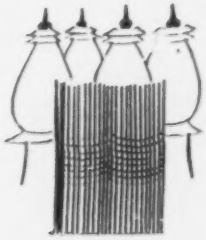
DIFFERING PERCEPTIONS

Two recent occurrences have highlighted differences on the way pictures are interpreted by members of the Shilluk community in Khartoum, Sudan, and by westerners working in the language. Leoma Gilley and Janice Ratcliffe gathered the following information.

One of the words selected for use on the alphabet chart was gago 'button'. A Shilluk artist drew the picture to the left.



In the process of finalizing the alphabet chart for publication the picture to the right was found in the Branch picture file. The new picture, also drawn by a Sudanese artist, seemed more realistic and so was used. A mock-up of the chart was made for the Shilluk Oversight Committee to approve. Every Shilluk who saw the chart immediately pointed to the new picture of the button and said that it had "too many holes." No one liked the new picture; the chart was made with the original picture.



The 1991 Shilluk calendar contains the picture illustrated above. Every Shilluk who sees it says "Fashoda!" Fashoda is the village where the Radh (king) lives. To westerners it looks like four water pots with a piece of matting in front. They asked a Shilluk friend to explain. She told them that one can tell it is Fashoda because the village is on a hill, the fencing goes around the village and the number of strips used to tie the fence show that it is the village of the Radh.

Pictures are not always what they seem. Members of the language group are the best judges of what to use.

Book Review

Gustafsson, Uwe. 1991. *Can literacy lead to development? A case study in literacy, adult education, and economic development in India.* Dallas, TX: The Summer Institute of Linguistics, 149 pages. $12.00 US.

Reviewed by Chris Jackson

Often, there is no better way to learn than by the experience of others. *Can literacy lead to development?*, by Uwe Gustafsson, provides a perfect opportunity to learn about the intricacies of a successful literacy program. This book is a recounting of a nineteen-year effort by the Gustafssons in the Adivasi Oriya language community in the State of Andhra Pradesh, India. It is also a description of a highly successful adult literacy project which resulted from a unique blending of cultural, political, economic, and social forces, as well as an enormous amount of work.

There is no doubt illiteracy is a major factor which plagues lesser-developed nations. The question of whether literacy leads to development, or vice versa, is one with which policy makers in these nations have wrestled for many years as they make decisions on resource allocation to achieve national development. Much of the debate on this relationsbip has been of the chicken-or-egg variety, with it being very difficult to establish the relative causality of these two forces. While the present case study does not seek to provide a definite resolution to this debate, the description of how literacy and community development have evolved in an integrated and synergistic fashion in the Adivasi Oriya project certainly provides fruitful ground for testing hypotheses.

The Gustafssons entered the Visakhapatnam District in 1970. The first thirteen years were predominantly devoted to linguistic and cultural research and preparation of reading materials. Tentative efforts were made during the 70's to introduce literacy, but with minimal success. Then, in 1983 a major literacy program was begun in response to a local felt need for literacy and Telugu (the official language) skills to improve access to better-paying jobs. Accordingly, a general plan was developed, an organizational structure was created, materials were produced, and teachers and supervisors were trained to man the program. The results of the project included 105 adult literacy centers in operation by 1989, with 8,773 adults involved at one time or another over the six-year period. Of these,

approximately 5,700 achieved literacy in one or both languages. Needless to say, these are impressive results.

The literacy program's main goal was to bring as many adults as possible to full literacy in their mother tongue and in Telugu, the language of wider communication. This goal included creating a habit of reading and developing an adequate array of literature of all levels and topics to support the practice of reading.

Literacy classes were held in literacy centers placed in villages where there was an interest in the program. If possible, an individual from the target village was trained as the instructor under the auspices of the village leadership. In this way, the instructor was not only someone familiar with the villagers but responsible to and under the political authority of the village chief. This strategy helped to ensure that the local teacher remained in the village on a long-term basis. Previous programs utilized outside teachers who typically lost interest in the harsh lifestyle in the villages and had difficulty winning the respect of the people. Because the village literacy centers were authorized by the local leadership and were operated by teachers drawn from the local community, they ultimately provided a natural platform for broadening the scope of the program into development-related issues.

In the latter stages of its development, the Adivasi Oriya project established a goal of self-sufficiency and self-management for the adult literacy centers. To accomplish this, a number of community development programs were developed and integrated into the literacy and development centers. This integration led to increased interest in literacy, and has led to numerous benefits for the people both socially and economically. New businesses, such as print shops, animal husbandry, stationery and book sales, and orchards, were established, and training for the skills necessary to successfully operate them was offered. These programs linked literacy to economic opportunities. The businesses were all managed by an internal board with the profits used to fund further adult literacy centers and development projects. It is projected that the program as a whole could achieve complete self-sufficiency by 1995.

Gustafsson identifies a number of factors which contributed to the success of the project. First was the national and regional development programs (roads, electricity, public transport, etc.) sponsored by the government. Such infrastructure development has provided crucial support to the project in the areas of communication

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and transportation services. Social, economic, and political factors have been a source of motivation for the people as they have come to recognize that literacy in Telugu, the State language, was crucial to their full participation in the political and economic affairs of the region.

Internally, Gustafsson suggests that the project's commitment to providing the participants immediate, visible, and positive feedback and rewards for achievement is a central factor in sustaining a high level of commitment and hard work on the part of the students. The project awarded literacy certificates at the completion of the ten-month program which are recognized by government agencies as suitable credentials for getting key jobs and gaining access to more specialized training programs.

A second key factor was the use of staff drawn largely from local personnel. As a result, all literacy instructors spoke the local language, were at home in the village setting, and were familiar with the endless complexities of the local and regional social structure. Furthermore, such teachers were sensitive to local cultural norms and served as excellent role models.

Thirdly, the project placed a high emphasis on attention to the learners and to their needs. Students received regular feedback on performance and public recognition and other rewards for outstanding achievements. Similarly, village leaders and organizers who gave outstanding support to the literacy centers in their villages also received special rewards. This focus on positive recognition for solid performance supported a high level of quality control at all levels of the program.

Finally, Gustafsson cites a strong commitment to accurate record-keeping and project evaluation as a key ingredient in maintaining overall quality and in making adjustments in the program when necessary.

Has the Adivasi Oriya adult literacy project led to economic development? Literacy is often considered as the key factor which unlocks further economic development because of the consistent correlation between poverty and illiteracy. In the Adivasi Oriya case, there appears to have been a significant history and interest in economic development prior to the initiation of the project. First, there was a strong motivation towards literacy in Telugu, the language of wider communication, as a means for gaining access to

further job and educational opportunities. The Indian government was also highly committed to development programs in the area with a variety of agricultural, reforestation and other technical programs. Thus, the literacy program, which offered the possibility to gain access to these and other opportunities, fit into what appears as an existing pattern of development. Therefore, it might be argued, it was an interest in economic development which led to literacy.

On the other hand, the Adivasi Oriya community had found that an interest in economic development could not be translated directly into economic development. Literacy is a mediating skill which facilitates access to the desirable features and benefits of development programs. Literacy was not the spark which ignited development in the area, rather it appears to have strengthened and contributed to the preexisting development trends and interests.

It is especially noteworthy to observe that the literacy project itself has become something of an 'industry' in the local region. The emergence of leadership structures, the construction of local facilities, and the development of supporting technical facilities (print shop, distribution outlets, newspaper, training programs, etc.) have served as something of an initial stimulus for and model of internal economic development. In this sense, one might almost make the equation that literacy IS development. The equation, however, is apt to be valid only as long as the formal literacy program continues to function.

This particular case study, then, tends to support the conclusion that literacy is a necessary but not sufficient condition for economic development.

The Adivasi Oriya project description provides many useful insights for the planning and development of an integrated, far-reaching literacy and development program. It demonstrates how adult literacy and community development, when integrated, can successfully address a wide range of needs and concerns of minority language groups. Gustafsson's careful attention to the cultural, political and economic factors of the project is a lesson to all of us that there is no substitute for achieving a thorough understanding of these factors in our own projects. This is not only a case study of a successful project; it is also a guide, by example, of the important components of any literacy and development program.

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'CUT AND PASTE' LITERACY

Jim and Dorothea Lander
SIL, East Africa Group

Jim and Dorothea Lander have worked in Kenya since 1986. Health problems prevented them from continuing with the Borana Literacy Project in early 1990. They are currently on a study program and plan to return to Kenya in 1992 in order to help train African nationals as literacy workers.

I. Introduction
II. The Borana Setting
III. A Writers' Workshop
IV. Conclusion

I. Introduction

Literacy projects are full of challenges. One challenge we faced in the Borana Literacy Project was how to help sister agencies meet their goals for existing literacy projects.

In order to do this we 'cut out' portions of a packaged literacy program, then 'pasted them' into the existing programs. The mix produced fledgling mother tongue authors, as well as reading materials for use in literacy classes.

A closer look at our 'cut and paste' use of *Working Together for Literacy* might suggest similar applications for your situation.

II. The Borana Setting

United Bible Society translators completed the Borana New Testament in 1978. Literacy classes were already in place, or soon to be started. Classes were sponsored by the Kenyan government, the African Inland church, the Evangelical Lutheran Church of Kenya and the Church of the Province in Kenya (Anglican).

About 5% of the 100,000 Borana-speaking peoples in Kenya were estimated to be literate. The majority of these learned to read in KiSwahili. Some were attempting to transfer those skills to their mother tongue.

However, progress in producing readers was frustrating. Literacy workers from sponsoring agencies in the Borana area asked for SIL's

help in 1984. We were eventually assigned to the Borana Literacy Project and began work in 1986.

While working on language learning, culture study, and building relationships, we also completed a preliminary review of the existing orthography. By the end of 1989 one community had nearly completed arrangements to begin literacy classes based entirely on the Stringer and Faraclas model.

In the meantime, the other agencies involved continued their literacy efforts. Field workers from two of the agencies were particularly eager for help with their existing programs. After discussions we agreed to 'cut out' aspects of Stringer and Faraclas[1], and we 'pasted' them into those programs.

III. A Writers' Workshop

In order to do this, we held a writer's workshop in December of 1989.

Since this was our first workshop, we deliberately kept it small. Literacy teachers from two agencies were invited. We hoped for five, but instead three mother-tongue Borana speakers attended.

The workshop had three goals:

A) to create two books:
   1) a story book for teaching that reading has meaning, and that reading sounds like language,
   2) a lesson book of prereading exercises;
B) to teach literacy teachers how to use both books in the classes they were teaching;
C) to build self-confidence in mother-tongue authors and thereby encourage true community development.

The workshop went smoothly. We spent the first morning discussing the Borana alphabet. Participants agreed together on how to address some problems with the existing alphabet. The discussion naturally progressed to spelling problems.

The next step was 'cut out' of *Working Together for Literacy.* Teachers were introduced to the concept of using stories to teach that reading has meaning and that reading sounds like language. They wrote and edited ten short stories for that purpose. The stories were transferred to stencils, and printed using a Gestetner. Then the stories were bound together. Finally, everyone practised using the

newly made books. However, the lesson book of prereading exercises was not even begun.

So, our goals were only partially met. The single greatest contributing factor for that was time. Participants applied themselves and worked very hard. But, only so much could be accomplished in the five days allotted for the workshop.

Still, what we did accomplish was significant. The story book was completed, and the literacy teachers were trained in how to properly use it. They left with one tool which they knew how to use and which would help them in teaching adults to read. They seemed to gain confidence in their own abilities.

How do we feel about the workshop? Let Jim tell you a story.

When the first story came off the press, my heart sank. It didn't please my eyes one little bit. All the printed lines slanted downward slightly from left to right, and the art work was less than professional. This is horrible, I thought. People will laugh.

However, in the middle of my disappointment I noticed the faces of the literacy teachers. They were beaming! In their eyes I saw deep satisfaction and the pride of accomplishment. In their hands was the beginning of the first Borana book they had ever seen, apart from the New Testament and a couple of primers, and they had made it. This was *their* book coming off the press, and it was wonderful!

My attitude suddenly changed. Here was a tool which would be used!

IV. Conclusion

The entire prepackaged program in *Working Together for Literacy* may not be useful in every situation. It wasn't, in regard to our helping sister agencies meet their goals for existing programs. Nonetheless, parts of the program did help.

Your needs are sure to be different from those in the Borana setting. Still, it's worth taking a look at Stringer and Faraclas. Who knows? A little judicious 'cutting and pasting' might be an answer to someone's problem, maybe your own!

Note

We 'cut' the following sections from *Working Together for Literacy*, by Mary D. Stringer and Nicholas G. Faraclas:

1) Writing Stories Guide, pp. 172-174,
2) Cutting Stencils Guide, pp. 175-177,
3) Workbook Writing Guide, pp. 185-187.

Each of these Guides have specific instructions, some of which will direct the reader to additional pages. Follow the Guides, and you will do fine.

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ANTS AND GRASSHOPPERS

Riena Kondo

Riena is a graduate of the University of California at Davis and has been working among the Guahibo people of Colombia, with her husband Victor, since 1963. She is presently the Literacy Section Head of the Colombia Branch.

I. Background
II. Why Produce Science Books
III. How the Books are Written
IV. Publishing and Distribution

I. Background

The Guahibo of Colombia have decided that if their children are going to receive bilingual and bicultural education in their schools (beyond first grade), they themselves will have to produce the school materials, since they are the only ones who know the Guahibo language. They don't want to wait until they might have Guahibo writers who are high school and college graduates; they feel that would be too late. So they have set up a Bilingual Education Committee (Comité Guahibo de Educatión Bilingüe Integral) and have held two writers workshops to start producing school materials, the best they can. At their request I taught composition in Guahibo and related classes in both workshops, and Marcelino Sosa, Guahibo leader featured in the film 'Between Two Worlds', conducted a discussion class on the significance and ramifications of bilingual-bicultural education for the Guahibo.

With the idea of working on the most urgently needed materials first, the Committee (some of whose members are bilingual school teachers) chose the areas of social studies, language arts, and science. They felt that, for the present, mathematics could be taught with Spanish textbooks. Guahibo borrow the Spanish names for numbers after three, and math concepts are not well developed in their culture. This brief note tells what they are doing for science, and why.

II. Why Produce Science Books

In Colombian primary schools, the traditional way of teaching science has been to teach the three 'kingdoms': animal, vegetable and mineral. The materials have, in the past, been prepared primarily

with the city child in mind. The Guahibo preschool child comes to the school, at about age seven, with considerably more firsthand knowledge of the animal and plant kingdoms than the city fifth grader, and he has some specialized knowledge that most city adults don't know. He therefore finds the Spanish science books in the part about the animal and plant kingdoms boring. The supplementary science books now being edited by the Guahibo are to meet this problem.

III. How the Books Are Written

Many of the animal descriptions were written some time ago by Guahibo whom we paid to accompany us to the Center to teach us their language, in the process of which they answered endless questions about grammar, and pronounced hard (for us) suprasegmental sounds over and over again. Since we didn't always keep them busy full-time, I gave them writing jobs. I had them make lists of all the names they could think of, of animals, then birds, insects, trees, fish, etc. Then they chose species and wrote descriptions of them. As they did each one, they checked it off the list. I typed the stories, tried to find illustrations and made up single-copy books. Before we got as far as publishing small postprimer books, these single copies were hung on a horizontal wire in our house with clothespins, so new readers could take them down and read them. We later published one on fish and one on trees. Now there are schools, and the one-copy animal books are being edited for use as school books.

Even though the stories were written by adults, Guahibo children know a lot of the information already. It was a challenge to write an introduction to each book that would present new information. I looked up things in National Geographic, Ranger Rick, and college-level specialized science textbooks and then bounced the new ideas off different Guahibo. Guahibo writers and editors helped make the new information clear in their language. Activities were added for the students. For example, the book on grasshoppers tells how Japanese children keep male crickets as pets in bamboo cages, feeding them and listening to the different species sing. The suggestion is that Guahibo students try it. The book has a questionnaire for the children to fill out on each species of grasshopper, katydid or cricket that they catch. These are the questions: 1) What is its name? 2) How many centimeters long is it with its antennae? 3) How long are the antennae? 4) How many feet

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does it have? 5) How many eyes does it have? 6) Where are its ears? 7) How many wings does it have? 8) Is it an adult? 9) Where does it lay its eggs? 10) What does it eat? 11) Where did you find it? 12) What was it doing when you found it? 13) How many centimeters can it jump? 14) What does it do to keep from being eaten by its enemies? 15) What is its voice like? (Guahibo can imitate very many animal sounds in their language.)

Preschool Guahibo boys hunt grasshoppers and lizards with small bows and arrows, so the two supplementary science books for second grade are lizards and grasshoppers. These are already off the press. For third grade, the books are about ants and caterpillars. For fourth grade, the books are about aquatic animals, bees and wasps, and parrots. For fifth grade, they are about land mammals, arboreal mammals, and palm trees. All of these books do not exhaust the material on hand. The book with the most species is bees and wasps (about forty). Wild animals are harder to observe; one must travel farther from the village. So older children study them.

Children helped in the preparation of the books. They collected different species of grasshoppers for the artists, and hatched out butterflies for illustrations. Some teenagers helped draw illustrations.

The little books are written in Guahibo with a Spanish translation at the back. In the Spanish translation, words had to be borrowed from Guahibo for many species' names, names of some of the plants they eat, sounds that they make, etc. (even after a thorough search for Spanish names). Where possible, scientific names are included.

IV. Publishing and Distribution of the Books

The Guahibo Bilingual Education Committee is the publisher and distributor of the books. (The first ones were printed with help from a grant from AID of Alberta, Canada.)

It had been decided to make these books 'library' books and to provide two to six copies free for each school library, depending on the size of the school. The children learn to work in small groups from second grade on, and there should be a copy for each group of three to five students so they can work together on activities described in the book -- activities that are assigned by the teacher. The only problem is that school libraries are almost nonexistent in the village schools. So the Committee had to first write up in Guahibo how to make and care for a library, so copies could be sent to the school

teachers with their first collection of books. I have not yet received any feedback on how this worked, but I recently received the news that the priest in charge of the training courses for bilingual teachers ordered from the Committee copies of the first two science books for all the schools under his supervision. It was decided to delay publication of the fourth book until the Committee determined whether the books are being used. We expect that word to be affirmative.

Update note: All of the books mentioned have gone to press except the two on mammals, and quite a few Guahibo schools now have libraries.

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BOUGH SHADE LITERACY

Eirlys Richards

Eirlys Richards, a member of the Australian Division, is the Language Programs Director of the Australian Aborigines and Islanders Branch.

Noonkanbah is a cattle station some 300 kilometers from the coastal town of Derby in the far north of Western Australia. The local aborigines from whose land the station was carved late last century have held the lease and run the station since the late 1970's. In 1978 a community school was set up to serve the children of the 150-strong population. In 1980 I was seconded to the school as a teacher linguist to develop a language program in Walmajarri, the main language spoken by Noonkanbah residents. I had been working as an SIL field worker in a Walmajarri community some 100 kilometers away.

Back in 1980 aboriginal community-controlled schools were fairly rare. Most schooling for Aboriginal children was provided by the government. Noonkanbah was the first school of its kind in this far northern area. The residents of Noonkanbah were enjoying the opportunity to have some input into what and how their children were taught. But even community schools have their moments of community disinterest and apathy. At the end of my second term one of the community leaders voiced his concern about the apathy of members of the community towards contributing to the school program. We teachers had also been feeling this strongly, so we supported his suggestion of a community meeting which he chaired.

One of the results of this meeting was the decision to start a women's literacy class. As well as providing an opportunity for some of the women to learn to read in Walmajarri this class contributed greatly towards the happiness and success of the school in third term, with much more community involvement.

It was called a women's literacy class but it turned out to be much more. Both the school board chairman and the station chairman strongly encouraged the women to come. Some old and middle-aged women who had always been the backbone of the school came. A group of younger women (30s and 40s) and a group of young married women who had had schooling and could therefore read English also came. Finally we had the small toddlers and babies who were the children and grandchildren of these women.

We started our sessions each morning at 7.30 along with the rest of the school. To the onlooker we probably appeared rather disorderly and in a most unlikely setting for any learning to take place. We scattered ourselves over the concrete floor of an open bough shade (a grass-roofed shed). I had one blackboard and some flash cards to supplement the students' reading and writing books, for the wind would have made short work of anything more elaborate in the way of aids. The toddlers played around inside and outside this area, often happily but sometimes fighting, crying or claiming their mother's or grandmother's attention, at times quite violently On Fridays when the watermelon truck came we had sticky chunks of watermelon amidst it all.

Actually there was some order in it. We had four groups of women working, each at a different level. I would move slowly among the groups giving lessons and listening to women read. The whole session lasted about three hours. As each woman finished her lesson and assignment she would draw pictures or color in the pictures in her primer. Sometimes the women just gossiped with their peer group.

We rarely began lessons immediately. The students came in dribs and drabs and we first sat around catching up on the gossip, sometimes about runaway wives, beltings and arguments but more often about more harmless topics. One morning Malikan described how her granddaughter had poked a stone into her nose and the efforts that her mother had made to get it out. On another occasion, Walkarri recounted the story of the arrival the day before of a white man leading seven camels. Occasionally they dug up a story from the past like the one about someone's uncle. The uncle waded into the river looking for crocodiles and suddenly found his arm firmly clamped by a set of crocodile teeth. He shouted for his wife on the bank to bring the axe with which he then beat the beast off.

I began to realize that the conversation in this group was rich in potential Walmajarri literature. So I decided that whenever I heard an interesting story recounted I'd say, "Let's write it on the blackboard." The teller, often helped by others, would dictate it to me. One of the young literate women or I would read it back to them, usually to everyone's delight and amusement. Then I would get one of these young women to copy it onto paper. I would also get a volunteer to draw two or three pictures about the story. These stories never amounted to anything long -- sometimes as short as three sentences.

After class had finished I would print or sometimes type the story and trace the illustrations onto spirit duplicating stencils, run them off, and staple them into a small booklet. The next morning the first thing I would do (after the gossip) would be to gather the ladies into one group, give them copies of the booklet, and read the story to them or have a literate read it. If it was a short story we would read it through several times with everyone joining in as we pointed to the words we were reading. Then they would take them home to show and read to others. Of course the topicality of the story provoked interest. We sent other copies to the bridging and Year 1 classes where the Aboriginal teacher read it to the children. Still others found their way to the senior girls' class where they were learning to read Walmajarri from a set of transfer primers.

We took note of the interest or otherwise shown in these duplicated stories and planned to have the popular ones printed for use in the Walmajarri reading programs as more permanent literature.

Another by-product of this group was the older women's traditional drawings. Because they were too old to catch on to the reading skill easily, they spent minimal time reading and spent a good deal of time drawing. Some of their work was quite delightful and certainly prolific. They included drawings of physical features (water holes, river trees -- types clearly identified), animals, and of characters from dreamtime stories. I was hardly able to keep up with this group, that is, making good use of their creations, but I did manage to have some traced and duplicated with their descriptive captions printed opposite. Others of their pictures I stuck onto cardboard and encouraged their use as cultural teaching points for children of bridging and Year 1 classes.

The physical nearness of the group to the children's classes and the fact that the classes were held concurrently with theirs also offered advantages. It meant that some of the older women who are some of the best story tellers and most knowledgeable about Aboriginal culture were ready and available to slip into the children's classes for culture sessions as they were needed.

It was a happy, relaxed group. There wasn't enough time to see a great deal of progress in the acquisition of literacy skills for the beginning readers, but it provided a good environment for the young women to make headway in Walmajarri teaching and writing and

illustrating. All the women were excited about seeing their stories turn into illustrated booklets overnight.

Men were a bit jealous of the group, I think. They occasionally wandered through to see what was going on. The schoolchildren felt free to join us at school breaks. I felt that the women's presence in the bough shade each morning with their various activities that fed into the children's program gave the morale of the school a lift when it was sorely needed.

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ORTHOGRAPHY AND THE INFLUENCE OF MORPHOPHONEMICS

Leoma Gilley for Wanda Pace

This paper was prepared for the orthography presentation at the Literacy Consultants' Seminarin Dallas, Texas, June 1991.

Expatriates began trying to write down the Shilluk language around 1917. Various alternatives were tried, with an ever increasing number of vowels being represented in the orthography. Ten vowels plus length (total of 20) has been the accepted number to date. Tone has never been written. In spite of all of these efforts, Shilluk has remained virtually unreadable for the majority of native speakers. Even when Shilluks wrote letters or texts, after even a few minutes, they were unable to read what they had written with any degree of confidence. Thus, it seemed appropriate to explore the problem further.

Only one of the morphophonemic problems will be discussed here, but it is representative of the need to include this important area in one's orthography. Vowel length is phonemic, as shown in the words kaal 'bring' and kal 'take'. However, that is only the beginning of the problem. There are in fact three sorts of vowels in Shilluk: short, long and variable.

Vowel Type	Citation	Possessed	Plural	Possessed
Short	bedh	bedha	bidhhi	bidhha
Long	ayeer	ayeera	ayerri	ayerra
Variable	wad	waada	waad	wadda

If the variable vowels are written as they phonemically sound, the word shape would be distorted. It becomes unclear which word is intended. Many nouns and verbs have the same letters, with the difference being made by tone (which is underdifferentiated) and vowel length. If spelling is phonemic, then in order to read, one must sound out every word rather than recognizing the shape of the word. Orthographically, we are now underdifferentiating vowel length between the short and variable length vowels and maintaining the word shape. This change has greatly improved reading fluency when tried with a large group of educated people.

Although it is not always possible to keep the singular and plural words the same, an effort is made to keep them spelled as similarly as possible. Plural words are distinguished by the use of double consonants. Thus, in wad and waad, these words are spelled wad and wadd. The reader has to learn that a word final double consonant lengthens the vowel [wa:d]. (This rule is based on a phonological process in which the plural suffix is shifted to the root vowel in certain instances.)

Although it was expected that a rule of this type would cause problems, it seems to reflect what is in the speaker's mind. This rule has been easily learned both in reading and writing.

But what of spelling? Will people actually be able or willing to write words in this way? After a one month English to Shilluk transition course, 85% of participants (93 completed so far) have scored 70% or above on an examination which is weighted heavily toward spelling ability. At present there is no dictionary for reference. People have to remember the rules. At a recent writers' workshop, the participants practiced spelling and reviewing each other's work. As a result, their spelling became much more consistent and they were able to read their own work easily and fluently. This pattern has not been the case in the past.

In conclusion, then, it has been our experience that while it would appear that adding morphophonemic spelling rules would seem to place a barrier to reading and writing, in fact it provided the necessary stepping stones for Shilluks to be able to read their language. Writing, while taking more thought, is readable by the author and others, which had not previously been the case. Therefore, as long as the rules reflect real phonological processes, they can contribute greatly to the readability of a language.

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NEUROLOGICAL IMPRESS METHOD (NIM):
A WHOLE LANGUAGE PROCEDURE

Kay Ringenberg

Mrs. Ringenberg joined SIL in 1985 after twenty-five years in public education. She has an MA degree with an endorsement in Reading and an Ed.S. in Language Education from Indiana University. She now serves SIL as a Literacy Specialist and is currently working on research in Literacy Curricula.

Young children in literate societies often learn to read without formal teaching. How do they do this? Some people think they learn to read by a process called the "Neurological Impress Method" (NIM). NIM was developed to teach brain-damaged soldiers to read again after WWII. It has been used successfully with those who have had strokes and with others recovering from traumatic damage to the brain. Though it has never entered the mainstream of teaching techniques in public schools, it is sometimes used by 'special education' teachers working one-on-one with students in the United States.

R.C. Weckelman and George Earley have researched the Neurological Impress Method for years. Weckelman has found that remedial students who are placed in the proper reading level and who are consistently taught by this method will make as much as a year's growth after 7.5 hours of reading. Earley found the method helpful in working with Downs Syndrome children and with others who had learning problems.

I have not personally found students to improve as fast as Weckelman said, but I have observed gains in vocabulary, a changed attitude toward printed materials, an improved comprehension level, and reading level gains using only this method. When I met a reluctant reader who had no innate desire to read, this is the method I used. To my knowledge, though, no studies have been done on this method in nonprint cultures.

One good point about this procedure is its ease of use. A literate person in a print society can easily learn the steps needed to implement NIM. For adaptation to nonliterate cultures, the graded material must already exist in the language of instruction and there must be a fluent reader to tutor the learner.

This might be a technique to try in a family setting where literate family members could teach others to read within the home. To follow the NIM method of reading instruction, the steps are:

1. Determine the student's instructional reading level if possible.
2. Select a set of books with a graded reading range preferably which will interest the student and cover reading levels from one year below his/her instructional level to one year above the level you want the student to obtain. If reading level is not known, use whatever materials are available.
3. Prepare to work consistently with the student for 30 minutes each day for a period of several months.
4. Sit side by side in a manner comfortable for the student. The way you both sit is very important.
    a. Determine which hand is the hand the student writes/eats with. If it is the right hand, sit on that side. If it is the left hand, sit on that side.
    b. Place your body slightly behind his/hers so that your mouth is in line with his/her ear. This is to:
        1) keep him/her from reading your lips and
        2) place your words in his/her ear.
5. Jointly hold the book being read between you. You hold one lower corner and s/he holds the other lower corner with his/her nonwriting/noneating hand.
6. Take his/her writing hand in yours and have him/her form a fist with the index finger extended. Place your hand around his/hers so that you can guide his/her index finger to keep it just below the word you are saying.
7. Read orally together the words keeping your voice about 1 and 1/2 beats ahead of his/hers. This allows him/her to:
    a. Hear the word just before s/he says it.
    b. Correct any miscued word before s/he finishes saying it.
    c. Intone the language correctly by imitation.
8. Stop every few paragraphs and ask comprehension questions to be sure the student is understanding the text being read. The more interaction about the text, the better. Developing visual imagery while reading is important.

Be sure to supplement this technique with creative writing. Combining NIM with writing should produce a good balanced program for reluctant learners. When you try it out, let me know.

Notes for contributors: Readers are invited to submit letters of comment and/or publishable materials to the editor of NOL at The International Linguistics Center, 7500 W. Camp Wisdom Road, Dallas, TX 75236.

Computer media: Contributors who have copies of their manuscripts on magnetic media such as 5.25" diskettes in PC/MS-DOS format are urged to submit the same along with their manuscript.

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Vol. 17.4 1991

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with the literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 W. Camp Wisdom Rd.
Dallas, Texas 75236
U.S.A.

EDITOR: Olive A. Shell, Ph.D.

ISSN 0737-6707

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ORTHOGRAPHY REFORM IN AMELE: PART ONE

John R. Roberts

John Roberts (from Liverpool) and his wife Kwai (from Singapore) have been working with the Amele people of Papua New Guinea since 1978. The Amele use the vernacular language in all informal situations in the village and the home; Tok Pisin tends to be used in formal situations. John completed his PhD program at London University in 1986, after which was published the Amele grammar and five other articles on the Amele language. John is a senior linguistic consultant for the PNG Branch.

This article is presented in two sections: Part I Graphemic Representation of Phonemes, and Part II Logographic Representation of Words. Part I is presented here; Part II is to appear in the following issue.

I. Introduction
II. Background
III. Graphemic Representation of Phonemes
  A. Vowels, Diphthongs, Long Vowels
  B. Consonants
  C. Summary of AOC's decisions re graphemes
IV. Notes
V. References

I. Introduction

The purpose of this article is to describe the proposals for orthographic reform in the Amele language[1] of Papua New Guinea (PNG). Under the auspices of the Summer Institute of Linguistics (SIL) I have been working with the Amele people since 1978 in the area of Bible Translation and Literacy. An orthography for Amele was devised in the 1920's and 1930's by the German missionary-linguists Wullenkord and Welsch. However, as a result of my own research into the Amele language I have discovered certain difficulties with this existing orthography. The Amele people have also realized that there are difficulties with it and in the years 1987-89 I worked with an orthography committee, hereafter Amele Orthography Committee (AOC)[2], to revise it.

The basis for the orthographic revisions is first of all my own research into the phonology and syntax of the Amele language, which

is described in Roberts (1987), and secondly my own observations of how Amele people write and read their language. I discussed my findings with the AOC over a period of several years, with the aim of reaching a consensus on how best to write the Amele language based on relevant linguistic advice and native speaker intuition. These decisions were implemented with the publication of the book of Genesis in 1989 and the revised Amele hymnbook in 1990.

From a linguistic point of view certain aspects of the AOC's decisions were interesting. The orthography problems were in two areas. Firstly, there were problems with the graphemic representation of certain phonemes and secondly, there were problems concerning how to represent certain word configurations orthographically. The nature of this problem could be reduced simply to the problem of deciding what is an orthographic word in Amele. The difficulty of deciding what constitutes an orthographic word in any language is notorious and it is generally regarded that formal criteria of phonology, morphosyntax and lexicology are more important than notional or semantic criteria. However, in this discussion it is demonstrated that in a number of cases the semantic criteria was decisive when the formal criteria conflicted.

II. Background

An orthography was devised for Amele by the Lutheran missionary-linguist, A. Wullenkord, in the 1920's and his description of the phonology and grammar of the language is documented in Wullenkord (circa 1930). His grammar also includes a substantial Amele-German dictionary. Wullenkord appears to have been an accomplished linguist since his description, although cast in the classic Latin mould, reflects fairly accurately the grammar of the language, and reports from those who knew him say that he spoke Amele fluently. Nevertheless, subsequent research in the language (Roberts 1987) has found that there are a number of problems with the orthography that he proposed and which has been in use since his time. These problems have been appreciated by the Amele themselves although not until recently have they made a serious attempt to resolve them.

Prior to 1988 the extant Amele literature comprised: 'A Life of Christ' by J. Welsch (1949), which contains extracts from the Gospels and is based mainly on the Gospel of Matthew, a catechism by A. Wullenkord (1928), revised by J. Welsch (1949), and a hymnal and liturgy (ed. Amman 1946). Wullenkord also published a book of Old

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Testament stories (Wullenkord 1931) and Welsch also published in Amele an historical account of the mission work amongst the Amele people (Welsch 1951), but only a few copies of these books are still in existence. The desire by the Amele themselves to improve their orthography arose primarily because of their plans to reprint the hymnbook. They realized that this would be a good time to correct the problems with the orthography as well as revise the content of the hymnbook.

The orthography problems occur in two areas. Firstly, the graphemic representation of certain phonemes is either inconsistent or does not adequately reflect the nature of the phonemes themselves. Secondly, there is inconsistent use of word breaks for certain types of words. The nature of the problems in each of these areas is described below along with the solutions adopted by the AOC and recommended for future transcription of the Amele language.

III. Graphemic Representation of Phonemes

The phonology of Amele is described fully in Roberts (1987: 332-377). The system comprises five vowel phonemes /a, e, i, o, u/ and sixteen consonant phonemes /b, d, f, g, h, j, k, l, m, n, r, s, t, w, gb, ?/?. There are also eight diphthong sequences /ae, ai, ao, au, ei, eu, oi, ou/ and two long vowel sequences /ee, oo/ which are significant regarding graphemic representation.

A. Graphemic representation of vowels, diphthongs and long vowels

The graphemic representation of the **vowels** is detailed in Table 1. The table contrasts the existing representation, i.e. the representation proposed by Wullenkord (circa 1930), with the revised representation, i.e. the representation proposed by Roberts (1987: 6, 10).

Table 1: Graphemic symbols for vowels and diphthongs

Phoneme	Existing	Revised	Phoneme	Existing	Revised
/a/	a	a	/ao/	au,ao	ao
/e/	e	e	/au/	au	au
/i/	i	i	/ei/	ei,e	ei
/o/	o	o	/eu/	eu	eu
/u/	u	u	/oi/	oi	oi
/ai/	ai	ai	/ou/	ou	ou
/ae/	ai, ae	ae	/ee/	ä,ee	ee

/oo/ ô,oo oo

As can be seen from Table 1 there is no problem with representing the single vowel phonemes /a, e, i, o, u/ for which the existing representation is adopted. The problems arise with some of the diphthongs, viz. /ae, ao, ei/, and the long vowel sequences /ee, oo/.

Diphthongs such as /ae, ao, ei/ are analyzed in Roberts (1987: 348-350) as underlyingly sequences of two vowels forming a complex nucleus. This analysis was adopted as the most efficient, since to analyze the diphthongs as unit vowels would have added eight more phonemes to the vowel inventory. Also the two-vowel analysis is supported by the following evidence:

(a) The reverse sequences to the diphthong sequences also occur, i.e. /ea, ia, ie, io, oa, ua, ue, uo/, as in (1) for example.

(i)	/ea/	[bæ'vɛʔ]	/be + aw + eʔ/	'to carry around neck'
	/ia/	[bɪ'æh]	/bia + h/	'his mouth'
	/ie/	[bi'ɛk]	/bieg/	'variety of vine'
	/io/	[fi'ɔk]	/fiog/	'Moluccas friar bird'
	/oa/	[ɔ'ædɛʔ]	/o + ad + eʔ/	'to get them'
	/ua/	[du'æn]	/duan]	'cold'
	/ue/	[nu'ɛn]	/nu + en/	'he went'
	/uo/	[nu'ɔlik]	/nu + ol + ig/	'I need to go'

(b) Where a diphthong is involved in a reduplicated form only the first vowel in the complex nucleus is reduplicated, as in (2), for example:

(2)	[jæ'jaʊnɛn]	/ja + jaun + en/	'as he dressed up'
	[jæ'jaɪk]	/jajai + g/	'his great, great grandparent/child'
	[bɛ'beɪk]	/bebeig/	'roots'
	[mɔ'mɔɪk]	/momoi + g/	'his wife's mother'

(c) There is also evidence from the possessed noun morphology that diphthong sequences such as /ai, ei, oi, au/ are phonetic

realizations of underlying vocalic sequences, as in the following derivations, for example:

	UR			SR	
(3)	/gia + ni + n/	->	giaØin	-> [gi'aɪn]	'your cousin'
	/sibe + ni + n/	->	sibeØin	-> [si'beɪn]	'your chin'
	/dolo + ni + n/	->	doloØin	-> [dɔ'lɔɪ]	'your ghost'
	/waw + ig/	->	wauØg	-> ['waʊk]	'her stomach'

(d) There are also a number of lexical items where there are alternate forms such that in one form a word medial consonant is deleted to produce a diphthong.

(4)	[ɔsæhiʔ] ~ [ɔsaɪʔ]	/osahiʔ/ ~ /osaiʔ/	'one'
	[lɛʔis] ~ [leɪs]	/leʔis/ ~ /leis/	'two'

In view of this analysis it was recommended that diphthongal sequences should be represented graphemically as sequences of two vowels. Under the existing orthography, in most instances, these diphthong sequences are represented in this way. However, there are specific cases where the diphthongal sequences are represented in a different way.

There are a limited number of lexical items in the language where the diphthongal sequences /ae/ and /ao/ occur. These occur in the following cases, (5-6):

(5)	ae	'flower species'	taeg	'mat'
	jaen	'rest'	taen	'cloud'
	saen	'time'	waeg	'long period of time'
	taec	'nest'		
(6)	ao	'yes'	haol	'cannibal'
	caoc	'an evil spirit'	laon	'a thick cord'
	daoh	'variety of root vegetable'	sao	'sky'
	gaog	'variety of yam'	tao	'a screen for shade'

The diphthongal sequences /ae, ao/ can be contrasted respectively with the more common diphthongal sequences /ai, au/, as in (7-8):

(7)	ai	where'	dain	'pain'
	aid	'female'	gaid	'always'

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	aig	'seed/sharp/tooth'	gaim	'crab'
	bail	'yellow dye'	jaih	'his leg'
	cain	'don't'	qaig	'sucker'
(8)	au	'my mother'	naul	'variety of wild fig'
	cauc	'useless'	qau	'an overgrown road'
	daul	'long plate'	saul	'variety of banana'
	haul	'species of lizard'	tauh	'unripe'
	lau	'species of fish'	taul	'conch shell'
	maul	'cage'	waug	'his stomach'

The diphthongal sequences /ae, ao/ are suspect, primarily because of their limited distribution in the lexicon. They also do not occur in the inflectional morphology of the language at morpheme boundaries whereas the other diphthongal sequences all do, as in (9) for example.

(9)	/ai/	/cot + oga + il/	'their brothers'
	/au/	/h + og + a(u)n/	'do not come'
	/ei/	/fe + i + a/	'he saw'
		/cot + ige + il/	'our brothers'
	/eu/	/h + u + me + u/	'we(2) came-SS'
	/oi/	/ho + lo + i/	'he used to come'
	/ou/	/h + o(u)m/	'I would have come'

It is also the case that where a number of the items in (5) and (6) occur in the hymnbook they are more often transcribed with the forms *ai* and *au* rather than the forms *ae* and *ao*, as in (10), for example:

(10)	sain	'time'
	jain	'rest'
	sau	'sky'

In various kinds of written material that Amele speakers have produced, the writers, especially younger writers, are often not sure whether to write the items in (5) with *ae* or *ai* and the items in (6) with *ao* or *au*. On the other hand, writers usually have no problem in deciding to write the items in (7) only with *ai* and the items in (8) only with *au*. In normal speech the diphthong in the words in (5) appears to be phonetically [ai] and the diphthong in the words in (6)

appears to be phonetically [aʊ]. However, when pronounced carefully in isolation they are phonetic [a^{e}] and [a^{o}] respectively.

These inconsistencies were presented to the AOC. They all insisted that the diphthong in a word like *saen* is different from the diphthong in a word like *dain* and that the diphthong in a word like *haol* is different from the diphthong in a word like *haul*. They also explained that the neighboring Austronesian language, Bel[4], has some of these lexical items and that they are written in that language with *ae* and *ao*.

It would seem, then, that one explanation for these anomalous items in (5) and (6) is that historically they may be borrowings from the Bel language and that the Bel pronunciation has been retained in Amele. This would be similar to British Standard English where a word like *rouge* has been borrowed from French but the French pronunciation, although nonstandard as far as English is concerned, has been retained. It was pointed out, however, that even in such cases of borrowing it is normal to adapt the borrowed word to the orthographic conventions of the borrower language, in this case Amele, rather than retain the orthographic conventions of the language borrowed from. It was also pointed out that the sequences /ae/ and /ao/ do occur in Amele with stress on the second vowel and it would be possible for new readers to confuse first stress /ae/ and /ao/ with second stress /ae/ and /ao/, as in (11) for example:

(11)	[sæ'ɛn]	/saen/	'he told'
	[dæ'ɛn]	/daen/	'it is cold'
	[ʊta'ɛn]	/utaen/	'he called'
	[ægæ'ɔʔ]	/agaoʔ/	'sorry'

Another explanation for the forms in (5) is possible in that one of the forms *taeg* 'mat' has an alternative form *tageg*. So it may be the case that in these forms the sequence *ae* has come originally from the sequence *aCe* where the intervening consonant has been deleted (cf. (4)). In any event the AOC felt that the particular spelling of the items in (5) and (6) should be maintained in order to preserve the distinctive pronunciation of these words. So this convention was adopted.

There are a number of lexical items, specifically particular verb forms, where the diphthong /ei/ is represented by graphemic *e*. This

occurs in the third person singular, today's past tense form of particular verbs, as in (12) for example.

(12)	bea	'he came up'
	cea	'he penetrated sexually'
	fea	'he saw'
	jea	'he ate'
	lea	'he went'
	mea	'he put'
	nea	'he came down'
	tea	'he went up'

The verb forms in (12) are analyzed grammatically as having a verb stem followed by the morpheme *-i* for third person singular subject and the morpheme *-a* for today's past tense, as in (13).

(13)	/be + i + a/	beia	'he came up'
	/ʔe + i + a/	ceia	'he penetrated sexually'
	/fe + i + a/	feia	'he saw'
	/je + i + a/	jeia	'he ate'
	/le + i + a/	leia	'he went'
	/me + i + a/	meia	'he put'
	/ne + i + a/	neia	'he came down'
	/te + i + a/	teia	'he went up'

The verb forms in (13) are comparable to other verb forms where the stem does not end with the vowel *e*. In these cases the morpheme *-i* is represented graphemically by *i*, as in (14-15).

(14)	/ho + i + a/	hoia	'he came'
	/no + i + a/	noia	'he went down'
	/ɠbo + i + a/	qoia	'he hit'
(15)	/bil + i + a/	bilia	'he sat'
	/nij + i + a/	nijia	'he lay'
	/nu + i + a/	nuia	'he went'

Another indication that the morpheme *-i* does in fact occur in the forms in (12) and should be represented graphemically is that the

quality of the /e/ vowel in these forms is not the normal [ɛ], that occurs word initially or medially, but [e], which otherwise occurs word finally and as the stressed vowel in the diphthong sequence [ei]. Since this is not a word final position the [e] in these forms must occur as part of the diphthong sequence /ei/ and should be represented graphemically as such. This proposal was accepted by the AOC.

There are a number of lexical items in Amele where the phonetically **long vowels** [ɛ:] and [ɔ:] occur. For some items this produces a contrast with the phonetically short vowels [ɛ] and [ɔ] in identical environments, as in (16-17).

(16)	[dɛl]	'tree species'	[dɛ:l]	'day'
	[mɛl]	'boy'	[mɛ:l]	'weeds'
	[mɛn]	'he put'	[mɛ:n]	'stone'
(17)	[dɔl]	'ghost'	[dɔ:l]	'animal/meat'
	[mɔl]	'sago thatch'	[mɔ:l]	'coconut cream'
	[sɔl]	'stick for carrying something'	[sɔ:l]	'wallaby'

In Roberts (1987: 355-356) these long vowel forms are analyzed as underlyingly geminate vowel sequences /ee/ and /oo/ respectively. This is a more efficient analysis since it does not require additional phonemes in the vowel inventory. This analysis is also supported by the following evidence.

(i) The vowels /e, o/ have tense and lax alternates [ɛ], [ɔ] and [e], [o] respectively. The lax alternates occur in word final position. However, the phonetic long vowels [ɛ:] and [ɔ:] do not have lax alternates in word final position as do the vowels /e, o/. These contrasts are illustrated by (18-19).

(18)	[ɛne]	/ene/	'here'
	[ɔno]	/ono/	'there'
(19)a.	[be]	/be/	'his neck'
	[ho]	/ho/	'pig'
cf.			
(19)b.	[g͡bɛ:]	/g͡bee/	'no'
	[lɔ:]	/loo/	'hospitality'

(ii) The long vowel sequences [ɛ:] and [ɔ:] can occur as surface forms in some forms of the reduplicated verbs[5]. In (20) and (21) the vowel /e/ or /o/ is reduplicated in either stem initial position or in the verb ending, depending on the class of the verb, to indicate simultaneous action.

(20)a.	[ɛdi]	/edi/	'like this'	->
	[ɛ:di]	/e + edi/	'as it was like this'	
b.	[æbælɛn]	/abalen/	'he searched'	->
	[æbælɛ:n]	/abale + en/	'as he searched'	
(21)a.	[ɔdɔn]	/odon/	'he did'	->
	[ɔ:dɔn]	/o + odon/	'as he did'	
b.	[dɔn]	/don/	'he understood'	->
	[dɔ:n]	/do + on/	'as he understood'	

(iii) In comparing certain forms with cognates in related languages it is clear that the corresponding Amele form with long [ɛ:] and [ɔ:] have come diachronically from geminate structures[6]. This is illustrated in Table 2.

Table 2: Cognate comparisons for geminate vowel clusters

	Amele	**Gumalu**	**Isebe**	**Bau**	**Panim**
'dry'	[mɛ:g]	[mɛʔɛk]	[mɛʔɛg]	[mɛʔɛk]	[mɛʔɛg]

	Amele	**Munit**	**Gumah**	**Rapting**	**Rempi**	**Balmak**
'wallaby'	[sɔ:l]	[sugule]	[sukuʔ]	[soɛl]	[soiʔ]	[sugur]

It appears that Wullenkord chose to analyze the long vowels [ɛ:] and [ɔ:] as additional phonemes. At least he chose to symbolize them graphemically as *ä* and ô respectively. However, there are a number of problems with this choice.

(i) This system is not applied consistently. While some items are transcribed according to this convention other items, especially reduplicated verb forms, are not, as in the representation of [ɛ:] in (22) for example.

(22)	/meen/	män	'stone'
	/g͡been/	qän	'centipede'
	/eeta/	eeta	'what'
	/abaleen/	abaleen	'as he searched'
	/eedi/	eedi	'as it was like this'

(ii) In the case of the representation of [ɔː] the system is doubly inconsistent in that, as well as there being cases where the symbol *ô* is used and other cases where the symbol *oo* is used, the symbol *ô* is used, when there is a minimal contrast of [ɔ] and [ɔː] between forms, to mark /o/ rather than /oo/, as in (23) for example:

(23)a.	/dol/	[dɔl]	dôl	'ghost'
	/dool/	[dɔːl]	dol	'animal/meat'
b.	/mol/	[mɔl]	môl	'sago thatch'
	/mool/	[mɔːl]	mol	'coconut cream'
c.	/sol/	[sɔl]	sôl	'carrying stick'
	/sool/	[sɔːl]	sol	'wallaby'

(iii) As well as there being these systematic inconsistencies with the existing orthography Amele writers often do not write the diacritic characters ˝ and ˆ consistently. So this produces confusion in the written form both for the /o/ - /oo/ forms in (23) and also for the /ee/ forms in (22), since these can be confused with /a/ as illustrated in Table 3.

Table 3: Examples of dieresis omission

/meen/ written as *man* instead of *män* means 'bird' instead of 'stone'

/g͡bee/ written as *qa* instead of *qä* means 'but/dog' instead of 'no'

/g͡been/ written as *qan* instead of *qän* means 'bamboo flute' instead of 'centipede'

These problems with the existing orthography of representing the sequences /ee/ and /oo/ were explained to the AOC and they agreed that the present system was confusing. As a result they decided to represent all instances of /ee/ with graphemic *ee* and all instances of /oo/ with graphemic *oo*.

B. Graphemic representation of consonants

The graphemic representation of the consonants is detailed in Table 4. The table contrasts the existing representation, i.e. the representation proposed by Wullenkord (*circa* 1930), with the revised representation, i.e. the representation proposed by Roberts (1987: 6, 10).

Table 4: Graphemic symbols for consonants

Phoneme	Existing	Revised	Phoneme	Existing	Revised
/b/	b,p	b	/l/	l	l
/ʔ/	c, '	c	/m/	m	m
/d/	d	d	/n/	n	n
/f/	f	f	/g͡b/	q	q
/g/	g, k	g	/r/		r
/h/	h	h	/s/	s	s
/j/	j	j	/t/	t	t
/k/	k	k	/w/	w	w

There is no problem with graphemic representation for most of the consonant phonemes[7]. The problems reside specifically with the representation of /b/ and /g/ in word final position and the representation of /ʔ/ in word initial position.

In Roberts (1987: 333-335, 346) the phonemes /b/ and /g/ are analyzed as having voiceless allophonic variants [p] and [k] respectively which occur in word final position[8]. This distribution is illustrated in (24-27).

(24)	[bæbægum]	/babagum/	'gecko'
	[bɛbɛlɛʔ]	/bebeleʔ/	'dream'
	[bɪbɪtɔh]	/bibitoh/	'his buttocks'
	[bɔbɔs]	/bobos/	'dust'
	[bubusælɛn]	/bubusalen/	'as he ran away'
(25)	[gælæp]	/galab/	'body ornament'
	[uvɛp]	/uweb/	'eagle'
	[ʔædip]	/ʔadib/	'black/blue dye'

	[bɔlɔp]	/bolob/	'trap'
	[hinup]	/hinub/	'5 days hence'
(26)	[gægæd]	/gagad/	'barbed arrow'
	[gɛgɛs]	/geges/	'species of betelnut'
	[gɪgɪʔit]	/gigiʔit/	'tight'
	[gɔgɔdɔh]	/gogodoh/	'his backbone'
	[gugulæʔ]	/gugulaʔ/	'hurricane'
(27)	[ælælæk]	/alalag/	'stagnant water'
	[ʔaɪlɛk]	/ʔaileg/	'species of bamboo'
	[ʔɪnik]	/ʔinig/	'similar'
	[ælɔk]	/alog/	'raven'
	[ʔæhuk]	/ʔahug/	'a smell'

In fact, there is a restriction to the occurrence of [p] and [k] in word final position in that the voiced alternates [b] and [g] respectively occur in word final position when the word comprises only one syllable, as in (28-29) for example.

(28)	[næb]	/nab/	'termite'
	[ʔɛb]	/ʔeb/	'betelnut'
	[sib]	/sib/	'rubbish'
	[gɔb]	/gob/	'knee'
	[tub]	/tub/	'comb'
	[ʔaob]	/ʔaub/	'white'
	[foob]	/foub/	'he would have seen'
(29)	[hæg]	/hag/	'sickness'
	[fɛg]	/feg/	'you(sg) saw(SS)'
	[lig]	/lig/	'species of shrub'
	[ʔɔg]	/ʔog/	'frog'
	[gug]	/gug/	'basis'
	[aɪg]	/aig/	'sharp/seed/tooth'
	[waog]	/waug/	'his stomach'
	[feɪg]	/feig/	'they saw(SS)'
	[hɔɪg]	/hoig/	'they came(SS)'

It is normal practice to design an orthography for an unwritten language that follows the phonemic system of that language such that there is one and only one symbol for each phoneme. So in the case of Amele for the phonemes /b/ ([b]/[p]) and /g/ ([g]/[k]) the graphemic symbols *g* and *b* should have been adopted for all instances of these phonemes. In fact the designers of the previous orthography chose to represent these phonemes allophonically or phonetically. The convention appears to have been to represent /b/ and /g/ in word final position by *p* and *k* respectively and in other word positions by *b* and *g*. Amele speakers invariably write *p* and *k* in word final position and this is the usage in the hymnbook for nearly every instance of a polysyllabic word. However, it has been noticed that for monosyllabic words Amele speakers are often unsure, especially for the phoneme /b/, whether to write the voiceless or the voiced allophone in word final position. Alternate spellings of some common lexical items have also been noted in the hymnbook as well as elsewhere and are illustrated in Table 5.

Table 5: Alternate spellings in Amele hymnbook for monosyllabic words

sab	~ sap	'food'	gug	~ guk	'basis'
hib	~ hip	'later'		nak	'small'
gob	~ gop	'knee'		aik	'seed'
meb		'kwila tree'		wauk	'his stomach'

It is also the case that there are a few instances in the hymnbook of polysyllabic words spelled with the symbols *b* and *g*, for example *galab* 'body ornament' and *tageg* 'mat'. Amele writers also appear to be unsure as to how to write the final character in certain reduplicated forms, since presumably in these cases it is perceived that the first instance of *b/g* is the same as the second instance even though it is phonetically different. Some illustrative examples are given in (30-31).

(30)	/abab/	'hand movement'
	/jabajab/	'inheritance/share'
	/dabadab/	'plenty'
	/gubagub/	'species of tree'
	/gabagab/	'stretcher'

(31) /magamag/ 'staghorn fern'
/mogamog/ 'species of tree'
/begabeg/ 'orphan'
/lugalug/ 'joist'
/megameg/ 'good work'
/ugug/ 'New Guinea eagle'

In Roberts (1987) it was proposed to revise the existing orthography to a phonemic representation for /b/ and /g/ since, while speakers of Amele can appreciate the phonetic difference between [b]/[p] and [g]/[k], the fact that they still perceive these as allophonic variants of the single phonemes /b/ and /g/ respectively shows up in certain ways as described above. This proposal was put to the AOC. Further examples of [g]/[k] alternation (see Table 6) were also presented from the possessed noun and verb morphology to illustrate that these phonetic forms represent the same phoneme /g/.

Table 6: Morphological illustrations of [g]/[k] allophonic alternation

[hiæk]	/hiag/	'his friend'	[hiægul]	/hiagul/	'his friends
[ætɛk]	/ateg/	'his daughter'	[ætɛgul]	/ategu/	'his daughters'
[ʔɔtik]	/ʔotig/	'his brother'	[ʔɔtugul]	/ʔotugul/	'his brothers'
[hɔlik]	/holig/	'I used to come'	[hugə]	/huga/	'I came'
[hɔlɔk]	/holog/	'you(sg) used to come'	[hɔgə]	/hoga/	'you(sg) came'
[hɔlɔɯk]	/holoig/	'they used to come'	[hɔɯgə]	/hoiga/	'they came'

After the presentation of this evidence the AOC decided that it would be better to represent all instances of the phonemes /b/ and /g/, including word final occurrences, with the symbols *b* and *g* respectively.

The other phoneme that has caused some orthographical difficulties is the glottal stop /ʔ/. This is analyzed in Roberts (1987: 333-334) as a full phoneme on the basis of the following evidence:

(i) /ʔ/ occurs in word initial, medial and final position and contrasts in these positions with the other phonemes in the language, /t, d, g/, from which it could be possible to derive the glottal stop (see Table 7).

Table 7: Phonemic contrasts for the glottal stop

/ʔ/		/t/		/d/		/g/	
[ʔæ]	'with'	[tæ]	'sago scraps'	[dæ]	'appre-hension'	[gæ]	'shellfish'
[ʔɛʔ]	'sex'	[tɛʔ]	'go up'	[dɛʔ]	'from'	[gɛʔ]	'interjection'
[ʔih]	'fun'			[dih]	'just'	[gih]	'forked'
[ʔɔl]	'bow-string'	[tɔl]	'tree center'	[dɔl]	'ghost'	[gɔl]	'red'
[ʔul]	'heart'	[tul]	'smell'	[dul]	'handle'	[gul]	'unripe'
[tɛʔɛp]	'he goes up (DS)'	[tɛtɛp]	'as he goes up (DS)'				
[dɔʔɔp]	'he knows (DS)'			[dɔdɔp]	'as he knows (DS)'		
[nɛʔɛp]	'he comes down (DS)'					[nɛgɛp]	'species of fish'
[gæʔ]	'iguana'			[gæd]	'crazy'	[gæg]	'boiling'
[hæʔ]	'boundary'			[hæt]	'sugar cane'	[hæg]	'sickness'
[tɛʔ]	'go up'	[tɛt]	'pillow'				
[ɔdɔʔ]	'do'			[ɔdɔd]	'garden path'		

(ii) /ʔ/ also contrasts with its absence in word initial and final positions (see Table 8):

Table 8: Contrast of /ʔ/ with its absence

[ʔæm]	'sun'	[æm]	'heap'
[ʔɛʊ]	'fermented root drink'	[ɛü]	'that'
[ʔɔn]	'his lips'	[ɔn]	'he got'
[ʔul]	'his heart'	[ul]	'axe handle'
[ʔus]	'wild'	[us]	'sleep'
[dæʔ]	'garden boundary'	[dæ]	'apprehension'

[bɛʔ]	'come up'	[be]	'his neck'
[jiʔ]	'road'	[ji]	'he eats (SS)'
[hɔʔ]	'come'	[ho]	'pig'
[luʔ]	'bark rope'	[lu]	'time of food'

Under the existing orthography two symbols are used to represent /ʔ/. The apostrophe symbol (') is used for word initial position and *c* is used for other word positions. There are problems with this arrangement. Firstly, it is contrary to the phonemic based practice of orthography design to have two different symbols for the one phoneme. Secondly, this convention is not strictly adhered to either by Amele writers or in the Amele literature in that frequently the initial apostrophe symbol is omitted from words where it should be written. For example, the symbol for word initial glottal does not appear to be used at all in the Life of Christ passages, and instances of glottal omission also occur in the hymnbook, as illustrated in Table 9. The omission can occur even in cases where it is a reduplicated form and the second glottal is marked with *c*. In other words, the apostrophe can be omitted even where there are compelling reasons for writing it. This would indicate that by having a diacritic type symbol for the word initial position of glottal stop the orthography system is implying that the phoneme is in these instances less important, i.e. subphonemic, and therefore does not need to be written.

Table 9: Examples of glottal omission in the Amele hymnbook

abi	/ʔabi/	'work/garden'
almi	/ʔalmi/	'he dies(SS)'
ajeqan	/ʔajeqan/	'we will appear'
ehewan	/ʔehewan/	'his riches'
emenuk	/ʔemenug/	'near'
ijigian	/ʔijigian/	'he will roast
obona	/ʔobona/	'he is walking'
ois	/ʔois/	'alright'
udun	/ʔudun/	'place'
acadi	/ʔaʔadi/	'as he fights'

ocobi	/ʔoʔobi/	'as he walks'
uculi	/ʔuʔuli/	'as he leaves'

In Roberts (1987) it is recommended that the symbol *c* be used in all word positions for /ʔ/ not only to maintain a standard phonemic based orthographic practice but also to help Amele writers to write the glottal where it occurs in word initial position. This recommendation was accepted by the AOC.

C. Summary of the AOC's decisions re graphemes

In summary the AOC decided to retain most of the existing orthography but to make revisions and standardizations in the following areas:

(i) Revisions to graphemic representation of phonemes:

/ae/-/ai/: the few words in the language which have the diphthong sequence /ae/ should be written as *ae* in each case.

/ao/-/au/: the few words in the language which have the diphthong sequence /ao/ should be written as *ao* in each case.

/ei/: where the diphthong sequence /ei/ occurs in certain verb forms this should be written as *ei* and not as *e* as before.

/ee/: all instances of long /ee/ should be written as *ee* and not as *ä* in some cases and as *ee* in other cases as before.

/oo/: all instances of long /oo/ should be written as *oo* and not as *ô* in some cases and as *oo* in other cases as before.

/b/: all instances of word-final /b/ should be written as *b* and not as *p* or *b* as before.

/g/: all instances of word-final /g/ should be written as *g* and not as *k* or *g* as before.

/ʔ/: all instances of /ʔ/, including word-initial position, should be written as *c* and not as ' for word-initial position and *c* elsewhere as before.

IV. Notes

1. Amele is a Papuan language spoken in Madang Province, Papua New Guinea. There are about 6,000 speakers. It is the largest of the Gum family of languages, Mabuso stock (Z'graggen, 1975). Amele is fully described in Roberts, 1987. The orthographic system adopted by these proposals is meant to apply to all the dialects of Amele (see Roberts, 1991b) The abbreviations used in this article for data examples include S(ame)S(ubject following), D(ifferent)S(ubject following), PRED(icate marker), FUT(ure tense), PRES(ent tense), TOD(ay's). P(ast tense), NEG(ative), D(irect) O(bject), I(ndirect)O(bject), S(ingular), D(ual), P(lural), 1(first person), 2(second person), 3(third person).

2. The AOC originally comprised the following members: J. Pul, F. Galem, K. Liwa, Silom Siodi, Naus Bal, Adaig Gulal, Bunuk, and Guti. Amele writers who have contributed to the orthographic research include: Israel Liwa, Aikun Naus, Ruth Silom, Misangul Adaig, Kulu Katid, Kulilau Adaig, Donai Guse, Jaktu Itiga, Fritz Naus, Samuel Gaun, Gee Gunar, and Hilda Naus.

3. In Roberts (1987:335) it is noted that phonetic [k] occurs word initially in a few lexical items and in one instance this produces a phonemic contrast with [g]; [kɛl] 'coconut scraper' and [gɛl] 'fence'. On this basis [k] is analyzed as a separate phoneme /k/. But this seems a marginal analysis since for some items there is a fluctuation between [k] and [g], for example [kis] ~ [gis] 'steam', and also the allophonic alternation of /g/ ~ [k] in word final position for multisyllabic words is without exception. For an orthographic system that will be suitable for all the dialects of Amele an orthographic representation of the phoneme /r/, which occurs only in the Huar dialect, is necessary (see Roberts 1991b).

4. Bel (Gedaged) is an Austronesian language belonging to the Belan subfamily of Austronesian language (see Z'graggen, 1975).

5. Verbs can be reduplicated in Amele to indicate simultaneous action or iterative aspect. Either the first syllable in the verb stem, or the object agreement marker, or the subject agreement marker can be reduplicated depending on the class of the verb. Reduplication in Amele is described extensively in Roberts (1991a).

6. The comparative forms were obtained from Z'graggen (1980).

7. There is also fluctuation between some phonemes in certain lexical items. Specifically /f/ ~ /p/ in a word like /safol/ 'axe' and /h/ ~ /s/ in a word like /fuluhdo?/ 'to multiply.' This kind of fluctuation is not considered a problem of orthographic representation as such but rather is considered a problem in deciding which dialectal variation should become the standard form. This can be resolved in each case.

8. There is evidence that /g͡b/ also neutralizes to [p] in word final position and the arguments for this are presented in Roberts (1987:336), but there is no evidence that native speakers can distinguish underlying /g͡b/ from underlying /b/ so for the purposes of orthographic representation it would be appropriate to represent all instances of word-final [p] with b.

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THE OLD AND THE NEW IN WRITTEN INDIGENOUS LITERATURE OF PERU

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This article was submitted to SIL as a contribution toward International Literacy Year, as was also Bough Shade Literacy of NOL 17.3.

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V. Bibliography

I. Introduction

For most of Peru's indigenous peoples, especially those in Amazonia, written native-authored literature is new[1]. Even literacy itself and the notion that their languages can be written is new to the speakers of most of the vernacular languages, the foundations having been laid over thirty-eight years ago when the Peruvian Ministry of Education began a bilingual education program in the jungle. The educational materials used by the first eleven teachers were prepared by members of the Summer Institute of Linguistics on the basis of phonological and grammatical analyses which were beginning to take shape in the languages of the six ethnic groups they represented.

The majority of the first teachers – each a native speaker of the language of the community where he taught – had finished only the first grades of primary school themselves. Each year during school vacation they studied more pedagogy and gradually completed their own primary and later secondary education.

II. Creative Writing by Primary School Students

The students in the first bilingual schools learned quickly since they began to read and write first in their own mother tongue and

later in Spanish, after having begun to learn to speak it. They learned so quickly, in fact, that very soon they had read through their beginning primers, math books, and social and natural science texts. Apart from some translated Bible passages, there was nothing more to read. It was in response to one teacher's question to the linguist who was advising him that native-authored literature in Amuesha (Yanesha) had its start: "What shall I do with the students who have learned all the syllables and have nothing to read for practice?" "Maybe you could have them write essays about their experiences or whatever topic interests them and they can read each other's stories."[2]

When the school year was over the linguist collected some of the notebooks, selected a number of the compositions, made minor editorial changes, and used them as intermediate primers and extra reading material. Once the students saw their names in print as the authors of the stories, and even their own drawings reproduced, they filled scores of notebooks. Their essays included accounts of fishing trips; of a turnover in the rapids; descriptions of many birds, medicinal plants, and animals; and legends told and retold through centuries but written for the first time. Some were humorous, others expressed their personal thoughts and feelings about school or other topics. One schoolboy summed up well the fact that they now possessed a new mode of communication "ever since we learned that ink is to write with."

From these student compositions the Amuesha Library series (La Biblioteca Amuesha) was initiated. "The purpose of this series was to stimulate the development of indigenous creative literature, while at the same time preserving in written form many aspects of the rich heritage of this indigenous group of the Peruvian jungle... Later, when other Amazonian groups began similar series, this series was renamed Colección Literaria de los Grupos Idiomáticos de la Selva (and still later Colección Literaria y Cultural Amuesha)" (Tripp 1981:316-17).

Student essays were an exciting beginning toward the development of an authentic indigenous literature; the repetitious and simple style of the children was ideal as reading material for their own age group. Later, Amuesha teenagers also began to write and develop a written style, described in the last section. One of their teachers who was lost in the jungle for two days wrote up his experiences. He said, "I thought my students should know how they almost lost their teacher." Later, when he went to Lima for medical attention, he told the linguist: "I'm writing down everything I see and

do. I thought we could make it into a book for the students and call it something like 'Adventures in Lima'."

III. Writers' Workshops

The Amuesha experience was repeated on a lesser scale in several ethnic groups of the jungle. However, for the development of a really rich literature, many adults needed to be involved. To this end, many Native Authors' Workshops have been organized in the last decade by the SIL in cooperation with education officials in ten different locations in Amazonia and the Andes.[3] The number of participants has varied from ten to fifteen and the duration from four to thirteen weeks. Some have been held in central locations away from the indigenous communities and included participants from as many as eight ethnic groups, while others have been held in an indigenous community with participants from only one group.

The central location has the advantage of affording a wide variety of new experiences which can stimulate the incipient author to try to share creatively and clearly with his readers some of his new experiences. There is also the advantage of cross-cultural interaction which helps each author recognize and appreciate aspects of his culture which are different from that of other groups. In the most recent jungle workshop, a Machiguenga was surprised to learn that not all groups make arrows the same way; so he wrote a detailed description of the different Machiguenga arrows and the appropriate use of each in hunting, with a picture of the arrow having pierced the animal for which it was intended. He wanted to make sure the Machiguenga way was preserved for posterity, and plans to write other booklets on several aspects of his culture.

The choice of an indigenous community, on the other hand, makes it possible for the elders—often illiterate—to participate actively in the preservation of some of their rich cultural heritage. They can interact daily with the authors and pass on to them their knowledge of many facets of the culture which the younger generation may not have mastered yet: medicinal plants and their uses, legends, cosmology, music, arts and crafts, survival and subsistence skills, ethnohistory.... Furthermore, when the writers all speak the same vernacular language they can constantly share ideas, inspire one another, and offer more constructive criticism.

In either type of workshop the participants begin with the easiest stage of writing: topics within the culture of both the author and the

reader. As they gain facility in expressing themselves freely and creatively, they progress to more difficult stages: topics within the experience of the author but outside his own culture, expressed clearly enough that the reader will understand; topics presented in free, idiomatic style about which neither the author nor the reader has had experience, but about which information has been gathered from reading resource material or from interviews; and translation, the most difficult, since the material is not usually within the experience of the writer or the reader, and both form and style are limited by the original document.

Since one of the goals of the workshops is to actually produce literature, participants not only write on a variety of topics at varying stages of difficulty, practise punctuation and drawing simple illustrations, but also learn to type, make dummies for their booklets, cut the stencils, print them on a silk screen, collate and sew them. At the close of the workshop each has written and printed one and usually two booklets for distribution among the speakers of his language.

The topics they choose to write on are both old and new. Most of the old themes represent parts of the oral literature with legends and origin stories predominating. The most frequently repeated of these include: how a smaller, astute animal outwitted a larger, stronger one; when various animals and other natural phenomena were human, and other origin stories; the race between the turtle and the deer or fox; the son of a bear and a woman; the flood story, and the fate of the disobedient children. Many of these stories are told to children in order to teach cultural values such as obedience, but the moral is usually left implicit.

Riddles – especially in Quechua – and songs are also popular genre of the oral literature. Among the Machiguenga, Shipibo, and other groups, there are not only many traditional songs, but everyday experiences frequently inspire new songs.[4] In the workshops they are beginning to take their place as part of the written literature.

Other old, i.e., cultural, topics which cannot necessarily be said to be part of the oral literature but which the writers have chosen to include are: descriptions of the fiesta and customs connected with marking livestock or other events in the agricultural cycle; marriage and childbirth customs; descriptions of animals and birds; folk taxonomies, e.g., animals that have hair and those that have feathers and wings; shamanism; history of fights; hunting instructions and

weaving instructions.

A new theme may be an account of the travel experiences of the author, his first visit to a large city, or a visit to a circus. Authors may describe telephones, a paper factory, typewriters, bicycles, animals of Africa, or even report on the writers' workshop they attended or on studying to be a bilingual teacher. Others are practical manuals dealing with: new pasture grasses; recipes; pregnancy and child care, vaccinations, first aid, or other health topics; carpentry; chicken raising, etc. Still others have written about various aspects of the grammar of their languages; history is a popular topic, too; some, especially among the Quechua writers, have written poetry on new topics such as the beauty of the mother tongue, the present Peruvian reality, or the earthquake of 1970.

Although translated materials cannot be said to be part of the indigenous literature, they do comprise a part of the vernacular literature. Some writers have chosen to translate folktales from other languages, others to translate the national anthem or some other song or piece of literature which they thought could be useful to their ethnic group.

The prospects of an ever increasing body of literature on both old and new themes are good. Not only are additional workshops planned, but also during the course of their normal school training, which began in 1984, jungle bilingual teachers and teacher candidates study courses on composition in the vernacular language, folklore collection, textbook preparation, and translation. They themselves can join the ranks of the authors and be better prepared to encourage their students in creative writing.

Nevertheless, problems such as the very practical matter of selling the literature have not been solved. It is impossible for many of the authors to sell their own work since it is usually not culturally acceptable to sell to one's own kinsmen, and the concept of spending money for books is still new. The body of literature is growing but the habit of reading in general is still among the new features of written indigenous literatures of Peru.

IV. New Applications of Rhetorical Devices

In the Amuesha experience, as older teenagers and a few adults began producing a body of written literature, a style which applied the rhetorical devices of the language somewhat differently from that found in oral literature emerged spontaneously and was quite

consistent from one author to another.[5] Similarly, in the Writers' Workshops, written styles have developed without instruction. Participants are given some guidelines for editing their own work such as to let it sit awhile and then reread it to make sure it is clear and will be interesting to the readers. They are also instructed to ask another speaker of the language to read their work and make suggestions for improving clarity or enhancing interest. They are not instructed, however, on specific changes to make, since it is assumed that these will probably vary from one language to another.

Tripp (1973) suggests that the major differences in Amuesha oral and written narrative texts can probably be attributed to the necessity to compensate in writing for the lack of intonation and other phonological features such as different voice qualities for different participants in a narrative, as well as the absence of gestures for clarifying reference. The differences she describes are summarized here: Written narratives are generally better organized than their oral counterparts and present material in chronological and logical order with few flashbacks. The introduction to the story gives quite a bit of background, but when an additional explanation is needed later on it is overtly marked by *ñehua* 'let me explain now'. Paragraph breaks are consistently marked by a temporal expression. Whereas in speaking, connectives which indicate the relations between clauses in a sentence are often omitted, they are consistently used in writing. Nouns also occur much more frequently in writing since there is greater potential for ambiguity in a language like Amuesha where often the only reference to a participant in an action is an affix marking third person. In oral narrative one of the most frequent markers of the sequence of events is the repetition of the main verb as the connective of the next sentence. In written texts, this sequence-marking device is replaced systematically by the clitic *-ña* which marks the actions in the main line of events. The sentence theme or topic is also consistently fronted and marked by the clitic *-pa'*.

None of these devices are new; it is their consistent application which is new in written narrative. New genre have also developed in Amuesha, including letters. In these, most writers use the expression 'now I'm going to tell you another thing' to change from one paragraph topic to another. As in written narrative, connectives are used quite consistently to indicate the relations between clauses, and noun phrases occur more frequently than in oral communications.

In Culina written texts, participant reference is also more explicit than in their oral counterparts; relative clauses and other appositional

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phrases occur frequently.[6] Upon editing their work writers may add after 'he said' something like 'his words, John, the one who ...' Such phrases usually occur at the end of a paragraph or section, and are followed in the next sentence by a paragraph marking connective such as 'and then.'

Verb constructions also differ—at least in frequency. In oral accounts, verbs are repeated and repeated and repeated to indicate repetition or continuation of an action. In written texts the repetition is shortened or it may be replaced by continuative or repetitive suffixes. Another difference in verb constructions is the relative infrequency in written texts of sentences in which nonfinal verbs consist only of the stem and a person marker; instead, each verb is more likely to indicate tense, aspect, and other appropriate suffixes.

Although the relations between clauses are usually marked explicitly, even in oral texts, a Culina editor quite frequently substitutes a subordinating connective for a coordinate construction. In written texts the information load is also denser so that there is much less redundancy than in oral narrative.

Similarly in Huallaga Quechua there is much more embedding and subordination, especially in 'how-to-do-it' essays, than in spoken language.[7] The so-called 'topic marker' *-qa* occurs much less frequently in written than in oral discourse.[8] Weber hypothesizes that this is so because in oral language the speaker is utilizing *-qa* as a mechanism for maintaining attention and gauges the necessity for its use by the listener's responses. This is congruent with his proposal that the general pragmatic function of *-qa* "is roughly that *-qa* marks those constituents of a sentence which, in the speaker's eyes, are most responsible for that sentence being relevant to its context" (1983:390).

Relevance to the context is not only important in accounting for differences in oral and written literature in Quechua, but also preliterate peoples are beginning to comprehend the relevance of literacy and written literature to their own cultural context. When a song about a monkey, written by a Yagua workshop participant, was sung in a meeting in the school it met with little apparent interest on the part of the audience. Later, however, an illiterate woman came up and demanded to hear it again and everyone gathered around to hear it. When the song was finished she said, "I have to have that book [and learn to read it]. I don't want to forget that song." For one of the Machiguenga authors, a very busy man and community leader, it was essential to participate in a second workshop to perfect

his skills in producing written literature "because if I learn that, my language will never be lost."

Notes

1. I am indebted to David Coombs, Martha Jakway, and Martha Tripp for their helpful comments and suggestions during the preparation of this paper. See Wise (1990) for a Spanish version of this paper

2. The Amuesha creative writing experience was first described by Tripp in a 1961 unpublished paper. See Tripp (1981) for publication details of later versions.

3. See Jakway (1981) for an account of native authors' workshop organization, Wise (1973) for a description of the first such workshop experience in Peru, and Wendell (1982) for detailed how-to-do-it suggestions, as well as other aspects of encouraging written indigenous literature.

4. See Davis (1979) for a description of the variety of themes in Machiguenga song prior to their being written.

5. See Frank (1983) and Leutkemeyer, Van Antwerp and Kindell (1983) for annotated bibliographies on contrasts between spoken and written language.

6. I am indebted to Arlene Agnew and Patsy Adams Liclan for the data on contrasts between spoken and written language in Culina.

7. The observations on differences between spoken and written language in Quechua were provided by David Weber.

8. Reported also by Levinsohn (1975) for Inga (Colombian Quechua).

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BOOK REVIEW

Peyton, Joy Kreeft and Leslee Reed. **Dialogue Journal Writing with Nonnative English Speakers: A Handbook for Teachers.** 1990. Alexandria Virginia: TESOL (Teachers of English to Speakers of Other Languages, Inc.). Reviewed by Kay Ringenberg.

This book is a good how-to-do-it for people who want to attempt journal writing as a tool for teaching the communication process of reading and writing. Although the authors are careful to point out that there is "no empirical evidence that journal writing/reading improves reading ability," they emphasize that journal writing promotes communication (Peyton 1990:33). The type of communication being used is coded language, that is, writing and then reading.

The authors quote Jerome Bruner, a forerunner in interactive curriculum design, as stating, "...the teacher can become a part of the student's internal dialogue--somebody whose respect he wants, someone whose standards he wishes to make his own. ..." (Peyton, 1990:3) by participating in dialogue journal writing. If the teacher and student reach the point of honestly sharing with one another through the medium of writing, a great step is taken to impact change.

Dialogue journal writing contains no evaluative comments, no turn-offs. By example, the teacher gives correct form and style as well as correct attitudes and values. It must be regular (daily is best, weekly a must), student-generated, continual and functional to be successful.

It can be guided by the student through the requesting of information, the giving of opinions, the clarifying of a point, the description of a personal problem, and the expressing of a complaint. In return, it can be guided by the teacher by the individualization of the response to meet the student's learning needs.

Although dialogue journal writing does not meet all writing needs, it certainly is a major way to get interactive writing started. It should be one of several (brainstorming, drafting, composing, revising, editing, and publishing) writing styles covered in the classroom.

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ARTICLE I: HIGH SCHOOL STUDENTS AS TEACHERS AMONG THE WESTERN SUBANON

Lee Hall

These articles by Lee Hall were submitted to SIL as a contribution toward International Literacy Year.

Lee Hall and her husband, William, have been working with the Subanon people in the Southern Philippines since they became members of WBT/SIL in 1964. William has a Ph.D. degree in linguistics and Lee an RN.BS from Indiana University. Lee has majored in literacy and medical needs among the Subanon. They have worked with the Translators Association of the Philippines since 1970. There is now a growing literacy work among the Subanon, and the translation of the New Testament is almost finished.

Thirty to seventy thousand Western Subanon live on the Zamboanga peninsula in the southern Philippines. They cover a wide area and have a diversity of living situations. The majority, however, are farmers in out-of-the-way places. The name 'Subanon' means 'to-be-upriver'.

The Subanon have created a language-wide organization including all of the four or five Subanon dialects. This organization has taken an active role in National Government politics. The officials are all Subanon, and a major purpose of the organization is to maintain their culture, traditions, and language.

The Western Subanon have a very positive attitude towards their language. They speak it among themselves both inside and outside of the home. Outsiders living in their areas often learn and speak Subanon.

The Summer Institute of Linguistics (SIL) began linguistic work among these people in the late 1950's. At that time the Subanon did not believe that their language could be written. The few who had tried were discouraged and frustrated. However, once SIL devised an alphabet, wrote and published some materials, things began to change.

For years most Subanon did not see literacy as important, but with influence from the outside world they have come to realize the value of being able to read and write. Many Subanon children are now in school, but illiteracy among the adults remains high. Most

adults seem to fear they cannot learn, and are ashamed to let 'outsiders' know of their illiteracy. They feel inferior and left out.

In the early 1970's a national translation group joined SIL. Together we have worked hard to combat illiteracy, more materials have been published, including a revision of the Subanon primer and teaching guide.

One literacy program, conceived of by Melinda T. (Laviña) Awid, now a member of the Translators Association of the Philippines (TAP), involved the use of students as teachers. In 1982 she described the program as her Masters Thesis for the Baguio Vocational Normal School.

Melinda worked closely with the Malaya High School of Sibuco, Zamboanga del Norte. This school is in a predominantly Subanon area; most of the teachers and students are Subanon.

Her first step was to study the area and determine the need. As Melinda, along with her partner, Hermilina (Perez) Catague, were living in the area, they were able to lean on personal observations, do a literacy survey, and examine school records. The results showed that most of the students came from sites where illiteracy was high, and that many illiterate adults deeply desired to be literate.

Her second step was to research other literacy programs and to get ideas from local educators about them. The results showed that illiterate adults eagerly asked for classes. However, few actually attended, and almost none completed courses. The teachers in these programs were often outsiders, and classes, usually held at the school, were often inconvenient for adults.

Melinda hoped to avoid some of the problems by training high school students to 'each one teach one--or two', and to do so in the privacy of the home at a time convenient to all. Traditionally, the Subanon learn from the older men and do not look on the young as teachers. However, since this type of education had not been available to the elders and since they are very proud of their educated young people, it seemed like a possibility. In some cases it worked very well.

The program Melinda envisioned was: 1) to be sponsored by MECS (Ministry of Education, Culture and Sports), with training and supervision done under their auspices. 2) to use high school teachers and upperclass students with all receiving community service credit.

3) to reach illiterate adults in the community with students from their homes or neighborhoods.

Melinda's third step was to take her plan to the local MECS officials. They enthusiastically granted permission to try the program for the 1981-1982 school year. Then, along with her partner, Hermilina, Melinda took a very active part in making this program a success.

The actual program fit into the school curriculum as community service which is required in Philippine schools of all teachers and students. Class periods were already scheduled for this. Often the time was spent beautifying community grounds, and often there were after school assignments. The literacy program was designed to be a part of this requirement.

Two high school teachers were chosen to help select, teach, encourage, and supervise the students.

The school posted a description of the program, and qualified Subanon students were encouraged to volunteer. The qualifications were stiff. Students must be upperclassmen with good grades, preferably honor students. They must have recommendations and a willingness to do extra work. They must solicit several illiterate adults who would agree to be a part of the program. Seventeen students applied. Each was interviewed and fourteen were accepted.

At the beginning of the school year the community service class period was used to teach these fourteen some principles of teaching and specifically how to teach each lesson in the Subanon primer. Melinda and her partner taught this class, giving special attention to student practice time and to helping the regular teachers understand how to teach the course in the future.

Four of the student teachers dropped the course but the remaining ten were enthusiastic and well received. Each week they spent after school time teaching. They were free to arrange a convenient time for themselves and those they taught. There was variety in what they chose; some met for several short periods, others met less often but for longer periods. Towards the end of the year several combined classes and did a little team teaching. The student teachers were supervised periodically as they taught. Each week they taught a new lesson and spent some class time discussing any problems that came up. Many ideas for improving the teachers' guide came from these sessions.

At the close of the school year ten students had taught fourteen adults to read and write. The school included these adults in their graduation program. The course was considered by all a great success. The school included it in their curriculum for the next few years. However, it did not work so well when Melinda and her partner moved away from the area.

The program generated much interest in literacy and awareness of the available materials. The materials are designed to be self-explanatory, and some people are teaching themselves to read.

ARTICLE II: THE TAPE RECORDER AS A TEACHER AMONG THE WESTERN SUBANON

Lee Hall

Literacy materials have been prepared, including a primer designed to be self-teaching. Some Subanon taught themselves to read following this primer with very little outside help. Others have taken advantage of literacy classes.

There are, however, some Subanon who are only slightly able to read. They were exposed sporadically to some schooling in the past. They had heard words like 'period', 'word', 'sentence', etc. and wanted to know what they meant. Often they had been taught the alphabet and to sound out syllables in a trade language they did not fully understand. They did not learn to associate meaning with this exercise and as the years passed they forget much of what they had learned. It was for these that this audio program, using the tape recorder as a teacher, was devised.

The completed project contained eight fifteen-minute lessons. The same lesson is recorded on both sides of the tape, thus it can begin on either side. A script was prepared, using two Subanon college students as readers. A female voice was used to give encouragement and instructions. Many of her comments deal with increasing reading comprehension as well as fluency, among the listeners. The most important instruction was to stop the recorder at the sound of a chime and do some specific task. A male voice was used to read from the text. The readers were very good, and many have enjoyed listening to the lessons.

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The text is a short Subanon folktale, 'Polongati', published in 1981. It is about a bird hunter and how he found wealth. The paragraphs are short and the booklet contains interesting explanatory pictures. However, there are many long similar-looking words. It was hard for hesitant readers to identify the minor differences. The plot was involved and somewhat unpredictable, making it difficult to guess what word should come next. We learned through this project that repetitive stories with very different looking words make much better easy reading books. Subanon contains many long words, so it would not be practical to use only short words. The booklet is an integral part of the program.

A hand-wound tape recorder was loaned, along with a lesson tape and booklet, to interested individuals. They were taught how to use the recorder and reminded to follow the instructions of the woman speaker. It soon became apparent that the most ignored instruction was to stop at the chime. They so enjoyed the tapes they just wanted to listen. We then trained some to co-teach with the recorder. These co-teachers became responsible for the recorders and for stopping at each chime or pause. They reinforced the instructions given on the tape. They also explained and supervised the writing practice on work sheets designed to go along with each lesson.

The lessons moved very slowly, too slow for many, but too fast for others. It was successful with listeners who were at the same level of ability. The tapes are still in use.

The following is a summary of what was taught in each lesson. The first lesson moved the slowest and had the least amount of reading. Lessons two through eight moved at about the same speed and had equal amounts of reading. The female narrator was generous with encouragement and comments on the pictures. Questions were asked throughout about the actual content and implied information of the booklet to encourage comprehension and discussion. Writing worksheets were prepared dealing with the concepts taught in each lesson. Students circled things and wrote on the sheets.

LESSON ONE: The objectives were to demonstrate reading; teach about words, periods, and sentences; build fluency; build comprehension; reinforce concepts through writing practice. This was accomplished by having the students listen to the male narrator read,

LESSON TWO: The objectives were to build on Lesson One and introduce the comma. A game of reading the wrong word was played. Students laughed at the very obvious wrong word, pointed to what should have been read, and read the correct word, the point being that they are not easily fooled if they can read.

LESSON THREE: The objective was to reinforce the first lessons; nothing new was introduced. The previous concepts were reviewed. During this lesson, the students counted function words. It was encouraging to them to see the same words recurring.

LESSON FOUR: The objectives were to review and to introduce exclamation and quotation marks. Students practiced using the intonation the character in the story might have used.

LESSON FIVE: The objective was again to review; nothing new was introduced. There were many quotes, so a drama was played with ladies reading the quotes of the female in the story and men reading the male quotes. The students very much enjoy drama. This was good intonation and reading practice.

LESSON SIX: The objectives were to review and to introduce the question mark. Drama was again used to read the various quotes.

LESSON SEVEN: The objectives were to review and to teach about the paragraph. Discussion centered on words making sentences and sentences making paragraphs. Comprehension was increased as the subject of each paragraph was discussed.

LESSON EIGHT: The objectives were to review and to reinforce previous lessons. The text contains an English and a Philippino version of the story. It was encouraging to the students to see the punctuation they had been studying actually used in those languages.

Again the lessons were well received. The students, having had some schooling, were appreciative of the explanation of words they had heard but for the most part never understood. There was much reading practice both with the narrators and without the tape. The material was soon memorized but having to point to words kept the students studying the text.

HELP FOR HOLISTIC THINKERS ORGANIZING WRITTEN MATERIAL

Frank McCollum

The McCollums are beginning a translation project in the Liana (Seti) language located on the Island of Seram, Maluku, Indonesia. Frank has also begun studies toward an EdD in Cross-cultural Education at Biola University, La Mirada, California. The McCollums are from the Williamette Valley of Oregon.

Those of us who think holistically rather than analytically sometimes wonder if we aren't a bit worse off than the proverbial person 'stuck off in left field'. Worse than being in a place where we don't fit, we've been given 'analytic' tools which don't fit—like a 'southpaw' being expected to use a right-handed glove!

Good news! I discovered a tool whose application 'fits' so nicely that I want to do more work just for the pleasure of using it. Microsoft's WORD 5.0 has an outline capability which makes the analysis component of qualitative research a pure delight.

I was assigned the task of doing some research on a particular style of education. I took a fistful of pens and a couple of thick tablets, kept out of the way with my eyes open, and rapidly filled my pages with one-liners (e.g.: "Students not responsible for 'white noise'", or: "Queuing done for functional purposes"). After the 'field' portion of this research, I had several dry pens, no empty pages, and no small consternation as to what I would do with all this data. My style of thinking wants to look at the whole mountain of data and condense it to some few generalizations. But how can I look at more then four or five statements at a time—especially when they are so disparate?

Enter WORD 5.0's outlining feature. I took three or four statements which had a similar theme and generalized them in a brief 'capsule'. I typed that brief generalization into the computer and formatted it as a PARAGRAPH[1] in WORD 5.0. Once again I took a few of my scribbled notes and made a generalization which I again entered as a brief PARAGRAPH. In this fashion I transformed all my scrawled field notes to legible capsules.

After all this condensing I still had 'pages' of notes, albeit stored in the computer—still too much to handle. Once again I found several of these capsules which had a common theme or topic and

brought them together.[2] I generalized their theme and entered that theme as an OUTLINE HEADING[3] above the section. I repeated the process for another few statements on a different theme and entered another HEADING. I continued this throughout the whole document. Under these headings I could cut and paste to my heart's content until all my entries fit more or less under some heading.

Now the beauty of WORD 5.0's outlining feature really shows up. I COLLAPSED[4] the outline to show only the headings; they almost fit in just one screen. This was a manageable list and within seconds I saw the pattern I had been striving to find! I inserted higher level headings to control this list, then collapsed the outline again to show only the highest level headings. How easy it was then to reshuffle them to follow a logical sequence! The nice thing is that, in this mode, moving a heading also moves its subheadings and BODY TEXTS right along with it since WORD 5.0 keeps all the subheadings and their texts and moves them to follow their main heading's movement.[5]

EXPANDING[6] back to the text level of the outline again, I read through the whole document and was delighted with the logical flow of thinking I now had on paper. All that was necessary was some minor reorganizing and I could begin to add the appropriate anecdotes.

All these years with just half a brain! But using the computer in this way, it's not just a data manager, it functions as replacement for the brain half which I have lamented ever since birth.

[Does this have a wider application for writers' workshops in holistic cultural groups? ED.]

FOOTNOTES:

[1]Things in full caps are specially defined elements in MS-WORD 5.0. PARAGRAPH refers to a specific block of text defined in WORD 5.0 by a carriage return. OUTLINE HEADING is a specially formatted PARAGRAPH recognizable in 'Outline View' mode (press SHIFT F2). BODY TEXT is merely standard text below any level of heading. COLLAPSE and EXPAND are functions performed in 'Outline Organize' (press SHIFT F5 after entering 'Outline View' mode).

[2]Cut and Paste (delete and insert) of a PARAGRAPH works very nicely in WORD 5.0

[3]WORD 5.0 manual pp. 496-7 tells about this process.

[4]In 'Outline Organize' mode, press MINUS (- on numeric keypad). Laptops give some difficulty here since they have no keypad. Press SHIFT ALT 8.

[5]Simply, in 'Outline Organize', select the heading, delete and then reinsert at the appropriate place.

[6]PLUS on numeric keypad or SHIFT ALT 7 on a laptop.

THE USE OF PICTURES IN LITERACY MATERIALS: AN INVESTIGATION INTO THE PROCESSING OF VISUAL INFORMATION IN PRELITERATE SOCIETIES

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I. Introduction
II. Mental Processing
III. The Art of Indigenous Societies
IV. The Current Situation
V. Conclusion
VI. References

I. Introduction

This paper is presented with two concepts in mind, which, though well-documented, have been largely neglected in literacy programs: first, that all human beings tend to process information in a very specific way; and second, that those individuals whom we label 'artistically talented' have learned to process at least some of that information differently. This second concept requires a definition of talent as 'an ability which is accessible to everyone, but which is utilized by only a few.' The specific reasons for such a definition will be explained in Section One; suffice it to say here that 'talent' as we know it involves a cognitive shift that is only now beginning to be understood.

These two concepts raise some important questions for the literacy worker. How are symbols processed by the brain? How are pictures processed? Does pictorial information aid or hinder the processing of orthographic symbols, or neither? If illustrations are helpful in written materials, how and when should they be used? Such questions involve many factors which are beyond the scope of this paper. Anthropological studies have made it clear that every society is different, and those differences are evident in cognitive processes as well as externally observable behavior (Plog and Bates

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1980:15-19). But in this paper I will attempt to accomplish one purpose: to show that pictorial information processing by the brain is far more alien to traditional teaching methods than is currently acknowledged in literacy methodology. In so doing, I will suggest some ways in which literacy workers can increase the effectiveness of reading materials by designing them to more accurately 'fit' the cognitive 'slot' into which they are being driven. The concepts involved are well documented; the suggestions are my own, based on those concepts.

Section One of the paper explores what we know about how the brain processes sensory and intuitive information, and more specifically, how visual information is processed. Section Two discusses the art of indigenous societies: how it operates in the absence of written communication, and what effect the introduction of written communication might have on aesthetic perception. Section Three gives an overview of current attitudes toward the use of art in literacy programs, and Section Four attempts to reconcile those attitudes with the material already covered, offering suggestions as to how understanding of visual information processing can be implemented within the literacy program.

I. Mental Processing

The question of how the brain processes information is certainly not a new one. For centuries, man has known that his brain consists of two equal halves, or hemispheres, but it was assumed that the two halves operated as mirror-images, so that a processing center on the left side would be duplicated in the same area on the right. But in the early nineteenth century, physicians treating brain-injured patients began to realize that the structure of the brain was not quite so simple. Finally, in 1861, a French physician named Paul Broca demonstrated a definite connection between injuries to the left side of the brain and loss of language ability (Gardner 1982: 300). He noted that injuries to corresponding areas on the right side of the brain seemed to cause no such loss. Many studies were consequently made over the years, but no significant discoveries were made beyond Broca's demonstration that linguistic ability resided in the left brain (Gardner: 301). Scientists and psychologists were content to say that the right brain 'was less advanced, less evolved than the other half -- a mute twin with lower-level capabilities' (Edwards 1979:28).

1. Sperry's commissurotomy studies

In the late 1960's, a series of psychological studies was carried out by Roger W. Sperry and his associates on epileptics who, because of the severity of their seizures, were treated surgically. The procedure, called a *commissurotomy*, involved severing the *corpus callosum*, a thick bundle of nerve fibers connecting the left and right hemispheres of the brain (Edwards: 29). By severing this and two other *commissures*, or junctions, the patients experienced relief from their debilitating seizures. Moreover, they seemed to have suffered no ill effects from the radical surgery. It seemed that both halves of the brain continued to function independently of each other. Sperry and his associates conducted a series of experiments on these patients to determine the extent and manner of impairment they had sustained, if any. (For an interesting summary of their findings, see Betty Edwards' *Drawing on the Right Side of the Brain*, pp. 29-32.) These became known as the 'split-brain studies', and have held considerable sway in educational and psychological circles since the findings were published, though in some cases the results have been oversimplified or misapplied (Gardner: 283-285). Basically, the studies showed that the two halves of the brain process information in two totally different ways. Sperry and his associate, Jerre Levy, summarized the differences in their initial report (Sperry 1968).

> "The data indicate that the mute, minor [right] hemisphere is specialized for Gestalt perception, being primarily a synthesist in dealing with information input. The speaking, major [left] hemisphere, in contrast, seems to operate in a more logical, analytic, computer-like fashion. Its language is inadequate for the rapid, complex syntheses achieved by the minor hemisphere."

Specifically, the left hemisphere analyzes, counts, keeps track of time, verbalizes, stores and processes symbols, and utilizes logic to solve problems. The right hemisphere establishes context, utilizes intuition to solve problems, imagines, works outside of a concept of time, perceives relationships, categorizes, works holistically, interprets spatially. (For a specific comparison of the characteristics of the two, see the chart, *Notes on Literacy, No. 62, page 19.)*

2. Information processing, language, and art

How is language processed according to this left/right hemisphere model? Broca established over a hundred years ago that the left hemisphere controls language ability in the great majority of individuals. Sperry's experiments confirmed this, as well as bringing

to light the functions of the right hemisphere. Given the analytical/symbological characteristics of the left hemisphere, it appears that when visual or auditory information is input, the left hemisphere matches that combination of sounds or visual symbols to preestablished meanings. It acts as a 'translator', changing visual/auditory components to semantic components and stringing them together in a linear sequence. This operation is reversed in speaking or writing.

But the operation described above is not all that is involved in language processing. The left hemisphere processes the semantic components, and understands them linearly, concretely. It can draw conclusions based on available facts, and can suggest solutions to problems. What it cannot do is interpret metaphorically, nor can it extract topic, theme, or moral. In short, it cannot provide a *context* for the information it handles (Jakobson 1980:28).

This situation is clearly shown in studies led by Howard Gardner at Harvard University. He and his associates have studied the linguistic behavior of patients who have suffered injuries to the right hemisphere, with some amazing results (1982: 313-315). The patients' vocabularies were found to be extensive, their use of grammatical constructions completely normal. When told a story, they could retell the essential facts, even recite entire sentences verbatim. But they could not accept the story as a functional unit. They did not understand main ideas. They completely missed jokes and morals in even the simplest stories. According to Gardner:

> "...they lack a 'plausibility metric': they seem unable to decide, given a specific event, whether or not it fits into an overall narrative structure. Hence they may either challenge items that are perfectly appropriate or, on the other hand, go to extraordinary lengths to justify elements that really do not fit into a given context ... . They are unable to figure out the underlying architecture or composition of a story ... . Instead, each part stands alone, a single brick unrelated to any other -- or to the entire edifice."

Only a combination of left/right hemisphere processing, then, allows us to use language effectively. The left hemisphere interprets symbols and establishes literal meaning, and the right hemisphere establishes context and significance, relating the information to previous experience.

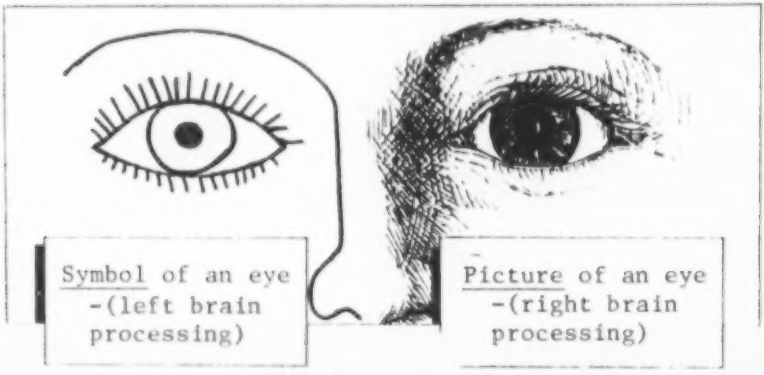
In art, much the same process takes place for the majority of individuals. The left hemisphere, already adept at processing symbols

because of lifetime practice in language acquisition, converts raw visual information into symbols. These symbols are used, beginning in early childhood, to represent objects in the real world. For example, in the United States, children learn early on to develop a symbol for the human eye, which usually looks something like this:

Whenever they draw an eye, then, animal or human, from the front or from the side, the left brain matches the object with the symbol, and, in effect, says 'here it is, 'eye' ', and the child draws it. These symbols are amazingly persistent, and, in fact most people continue to use them throughout their adult lives, with little or no modification (Edwards: 62-64). This reliance on symbols in drawing is by no means confined to America, or even to developed countries. Jo Machin has "published" some interesting examples of artwork from South America (1981:7,9) which show this tendency beautifully.

Here the definition of 'talent' offered in the introduction comes into focus: 'an ability which is accessible to all, but which is utilized by only a few' (p. 1). The right hemisphere, which perceives spatially and holistically, is capable of mentally and physically reproducing objects in the real world in minute detail. It is the 'mind's eye' of traditional thought. It bypasses symbols entirely and processes visual information exactly as it occurs in the real world. Unfortunately, since the left hemisphere is used more frequently by most people, it intercepts visual information before the right brain can process it, and inserts the appropriate symbol from its 'library' (Edwards: 76-79).

Figure 1:



Thus, unless an individual 'learns' how to 'bypass' the left hemisphere and input information directly into the right, he/she is not able to output anything more than a crude, often childlike symbol for any object (fig. 1). Those people whom we call 'artists' have either stumbled on how to do this during their youth or have trained themselves, usually unconsciously, to do it. Betty Edwards relates the reality of this 'shift' from an artist's perspective (1979:vi,vii):

> "I have always done a lot of demonstration drawing in my classes, and it was my wish during the demonstrations to explain to students what I was doing—what I was looking at, why I was drawing things in certain ways. I often found, however, that I would hear my voice stop and I would think about getting back to the sentence, but finding the words again would seem a terrible chore—and I didn't really want to anyhow. But, pulling myself back at last, I would resume talking—and then find that I had lost contact with the drawing, which suddenly seemed confusing and difficult. Thus I picked up a new bit of information: I could either talk or draw, but I couldn't do both at once."

So drawing (and most other art forms) is processed through the right hemisphere, while verbal and written communication goes through the left predominantly, while accessing the right hemisphere for context, topic, impact, etc.

Turning now specifically to written communication, some interesting facts surface. Language orthographies began in the mind of man as symbols, simple pictures which represented verbal language units or concepts. Hieroglyphs gradually became ideograms, and in most written languages of the world, those ideograms became associated with language sounds rather than semantic units (Chinese is one of several notable exceptions). But from beginning to end they were left-hemisphere *symbols*, not drawings.

An interesting example of what might well have been written communication in the making is the graphic repesentational systems of certain Australian Aboriginal groups like the Walbiri or the Pintupi (fig. 2; p. 52). These systems use very economical symbols to represent objects in the real world. Though Lesley Hansen (1983:8) and Nancy Munn (1971:336) refer to these systems as 'art', they are in fact closer to written language, since their sole purpose is to communicate. In her article about Pintupi art forms, Hansen herself gives strong evidence to support this conclusion: "... European art is a meaningless jungle to the Pintupi. Line drawings of the very familiar were completely incomprehensible" (p. 8). "However", she continues, "we have found that visual discrimination based on letter

shapes has given no difficulty whatever" (p. 9). In short, the Pintupi had no trouble learning to work with symbols they had never seen before, but had great difficulty deciphering pictures they had never seen before. Hansen goes on to conclude that using pictures in the Pintupi literacy program would be confusing at best. (She did use them, however, because of pressure by a small group of educated Pintupi).

So why couldn't the Pintupi decipher pictures? Their minds were locked into use of the left hemisphere to decode visual representations. Detailed drawings, or even simple outline sketches, were meaningless to them because they weren't part of their cognitive processing system.

The Western World has developed a singularly interesting mutation which we call the 'illustration'. Illustration is kept carefully separate from the 'fine arts', as evidenced by the fact that we call the people who draw illustrations 'illustrators' and not 'artists'. An illustration is an attempt to emphasize the key points or topics of a story or any other written work by offering a visual representation of that point or topic. So then, it is an extension of the written word. But a drawing produced by the right brain cannot, as is discussed above, be processed by the left unless it corresponds with a symbol or group of symbols in the left hemisphere's 'library'. It must be processed by the right hemisphere. A cognitive shift is therefore necessary to scan from written material to illustration; to a lesser extent *the same cognitive shift that occurs when an artist draws.* We in the Western World have learned how to do this, at least when we are reading illustrated material, but what happens when similar materials are introduced in a preliterate group whose language has just been given a written form? Their minds must simultaneously grasp and compile strange new symbols, learn to establish contextual and topical relationships, and attempt to make an unconscious cognitive shift between orthographical symbols and illustrations. All over the world, language groups are being asked to do just that. They may succeed; it is certainly not an impossible task. A young child when thrown into a lake stands a good chance of learning how to swim; an adult in the same situation is more likely to drown.

III. The Art of Indigenous Societies

Few societies exist that have no method of artistic expression. For most primitive societies, art functions concurrently with either religious ceremony or traditional, utilitarian handcraft. Warner Muensterberger (1971:4-10) lists three general elements of artistic

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creativity in primitive societies: (1) the inclination to personify things and ideas; (2) the tendency for art objects to produce an exhibitionistic attitude, in which the owner or creator of a work of art gains considerable prestige; and (3) similarity of style within a certain geographical area. These are very general characteristics, but they emphasize one important fact quite clearly. For the majority of the world's societies, art for its own sake, for the pleasure of creating alone, does not exist. This is not to say that a Maori sculptor, for example, does not enjoy producing the intricate carvings for which his people are famous; to suggest such would be ridiculous. The point is that for that Maori sculptor, as well as for most artisans in primitive societies, the production of a work of art is intrinsically tied to ceremony or strict tradition. Art is created for a specific purpose not related to aesthetics.

Because of this ceremonial and utilitarian emphasis, the art of many primitive societies is basically left-hemisphere symbology. Its creativity lies basically in minute changes made by individual artists which, over the course of time, become part of the symbology. Since any creativity must come from the right hemisphere, it is obviously used, but it is not *primary*, since many, if not all, of the basic design motifs are standard, passed down from one generation to the next (see Chipp 1971: 146-170)

1. Art and the introduction of written communication

In a few preliterate societies, this symbol-based art is a form of communication. The Australian Aboriginal groups discussed above have developed a system which, over the course of time, might have evolved into a unique written language, had colonization not interrupted the process. Thus it is no surprise that the Pintupi were able to learn to work with letter shapes fairly quickly (Hansen: 9)

It has already been pointed out that the introduction of written communication involves many mental adjustments on the part of the peoples involved (p. 9). Here the Pintupi are an exception in that they had already learned to categorize and transfer meaning to visual symbols. In most cases, however, when a language is spoken but not written, it is processed by the brain in streams rather than "chunks"; the categorization is based on auditory input rather than visual input, so the brain attaches certain meanings to certain streams of sounds, rather than to groups of symbols (Jackobson: 11-18).

Symbolic art may communicate, but it does so separately from the spoken language, hence it is not cognitively a part of the language

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processing system. It operates through left hemisphere visual cues which trigger right hemisphere concepts and ideas. When a representational system, or orthography, is introduced, the brain apparently must reorganize itself in order to learn to "read" it. It must search for sound streams and their corresponding meanings and break those streams down to match the dictates of the orthography. If the orthography is well designed, this process is simpler, but still by no means simple. In most cases those learning to read will be adults whose cognitive processing systems have been operating in the same way for many years. Altering those systems after so long might prove to be quite a struggle.

2. The introduction of illustrations

Along with this struggle comes another: reading materials often utilize illustrations to emphasize key words or ideas. With no experience in decoding realistic representations or pictures that "illuminate" words or topics, the new reader or preliterate has never made the kind of cognitive shift that is necessary to connect the picture to its meaning or to its larger context as an element on the page of the book.

The question of whether or not this problem can, or should, be avoided is a complex one, involving psycholinguistic concepts and consideration of individual learning styles. Though many literacy workers have very carefully taken into account many cultural and psychological factors in implementing their programs, use of illustrations in some of those same programs has been rather indiscriminate. This problem will now be examined in hopes of pinpointing specific areas of difficulty and offering possible solutions.

IV. The Current Situation

As far back as 1960, communications specialists were realizing that printed words and illustrations were strange bedfellows; Stuart Cooney even went so far as to say "I found myself wondering whether words and pictures do indeed belong together at all, and if they do, what might be some of the conditions of their compatibility" (1960: 63). Interestingly, he goes on to conclude that they do belong together *only* when "the total message is central, rather than that the printed word is central, aided by illustrations" (p. 64).

This concept, though it predates Sperry's left/right hemisphere studies, reinforces some of their implications for literacy programs.

Illustrations, rather than being secondary aids in printed materials, must actually be an integral part of the message design.

Cooney's insight is not reflected in Sarah Gudschinsky's comments on the use of illustrations. Her writings (1973) hold to the traditional attitude towards pictures as "aids". She lists six purposes of pictures in primers (1973: 102,103).

First, she says that they "keep the page from being crowded ... . If a page is solid text, it is harder on the eyes and harder psychologically to read than if it is broken up." This reasoning, given understanding of left/right hemisphere functions, is flawed, since it is "harder psychologically" to scan from words to pictures than to read even a crowded page of text, since no cognitive shift would be involved in the latter. A better way to avoid the confusion of a crowded page would be to leave white space; the idea that a picture improves the page layout, and hence the readability, is a purely Western one.

Second, she holds that illustrations will "make the primer cultural", adding that this point is only valid "if the pictures are indeed a reflection of the culture". This is an extremely important point, one that she mentions only in passing. For pictures to be a true reflection of a culture, they must be developed *by* the people of that culture, as an expression of the values of that culture, as well as a reflection of the cognitive processing systems of the people. If the people have no desire to do this, or if the literacy worker has no desire to put forth the effort necessary to ensure this, then it might be more prudent to leave out pictures entirely. This is not ideal, but it is certainly preferable to using traced pictures from clip art books, which Murphy and Scheffler (1983:13) discuss as a common practice in writer's workshops. (Murphy and Scheffler comment that "very few groups" prefer no pictures over tracings. This is an interesting comment; it would be even more interesting to find out how this preference was determined.)

Third, Gudschinsky says that pictures "give pleasure". This may be very true, if the pictures are easily decodable. There is a great danger in assuming that an illustration is being decoded accurately when in reality it is not. The material presented in this paper indicates that a person must be taught how to 'read' pictures just as he must be taught to read words. The reader must be *trained* to make the cognitive shift from illustration to text and back to illustration,

etc. This training is certainly not difficult, but if not taken into consideration, in many cases the teaching process will be impeded.

The fourth purpose Gudschinsky lists is 'to stimulate oral and written expression'. This is certainly valid, but again only after the student has learned to decode the picture properly, and only if that decoding is a part of his cognitive processing system.

Fifth, Gudschinsky says that pictures help "to tell the story". This is much like the old 'one picture is worth a thousand words' idea. But one picture is worth nothing if the people who see it attach no significance to realistic representations. If they are not able to match that right hemisphere input with a left hemisphere symbol or set of symbols, or if the picture does not act as a cue to trigger the memory of a corresponding object in the real world, then it is useless.

Finally, she says that the most important purpose of a picture is to help the student "to remember the key word". In order for this to be true, the picture must become a symbol in the left hemisphere's library of symbols. If it is at all a detailed illustration, the left hemisphere will reject it as symbol. If pictures are to be used as mnemonic devices, then, they must be simple enough to be remembered as symbols, yet unambiguous enough to have only one semantic correlate.

Another prevalent attitude in literacy circles is that, within a people group, there will exist artistically 'talented' individuals in amongst a sea of 'untalented' individuals. Margaret Wendell, while discussing the training of indigenous artists, displays this attitude (1982:120):

> "Jo Machin (SIL artist in Mexico) has taught art classes in several workshops, helping the trainees to develop their abilities to their own satisfaction. As experienced as Machin is, she states that at times it is quite difficult to decide whether the picture which the trainee struggles to produce is representative of a true cultural art form, or if it is merely the work of an unskilled trainee who really has no artistic talent." (p. 120)

Again I refer back to the definition of talent as "an ability which is accessible to everyone, but which is utilized by only a few" (p. 1,6). Anyone can learn to draw if he knows how to make the left-right cognitive shift. Literacy workers and translators who find artists in their language groups have found people who have learned to make that shift. Literacy workers and translators who do not find any artists among the people they are working with can *train* artists. By

training I do not mean setting up art classes; I am referring to teaching people to make the perceptual shift which would enable them to draw on their own, as part of their own cognitive systems.

There is one catch: desire is the key. There is mention above that if there is no desire among the people to use pictures or learn how to draw them, or if the literacy worker has no desire to spend the time and effort necessary to develop perceptual acuity, then it is best to leave out pictures completely. They will be foreign elements. Showing people the value of artistic expression is every bit as difficult as showing them the value of written expression, but if pictures are to be used as effectively as they can be, then it must be done.

Suggestions

Detailed suggestions in the form of a plan for implementation of art in a literacy program are far beyond the scope of this paper; however, some guidelines that might prove valuable follow:

1) Murphy and Scheffler (1982:9) suggest three stages of difficulty in illustration, paralleling Wendell and Herzog's 'Stages of Literature':

STAGE 1: illustrations which deal with subjects known through experience to both the illustrator and the people.

STAGE 2: illustrations which deal with subjects known by experience to the illustrator, but unknown to the target group.

STAGE 3: illustrations which deal with subjects indirectly learned by the illustrator through books, magazines and discussions and are unknown to the target group.

These stages are a valuable tool in assessing the level of difficulty of subject matter in illustrations, but this paper has attempted to show that effectiveness of illustrations is tied more to the level of perceptual difficulty than to the familiarity of subject matter.

In view of this, I would like to suggest four levels of *perceptual* difficulty:

STAGE 1: illustrations which are simple, easy to encode as symbols, drawn by an indigenous artist according to the dictates of his cognitive processing system.

STAGE 2: illustrations which are realistic, difficult to encode as symbols, drawn by an indigenous artist according to Western stylistic influences.

STAGE 3: illustrations which are simple, easy to encode as symbols, drawn by an artist from outside the culture, according to Western stylistic influences.

STAGE 4: illustrations which are realistic, difficult to encode as symbols, drawn by an artist from outside the culture, according to Western stylistic influences.

Every literacy worker needs to be aware of these levels, and should at the very least do everything within his/her power to avoid levels three and four. Using those two levels is roughly the cultural equivalent of adorning a first grade American spelling book with Sung Dynasty Chinese watercolors.

2) Gudschinsky says, "It requires special training both to see and to draw" (1973:107). She is half right. If a person learns to truly see, he will be able to draw (given he knows how to hold a pencil). Literacy workers must train people to see if they want truly effective level one illustrations. Here I can only recommend reading Betty Edwards' book (see p. 4); there is hardly space here to elaborate. There are questions, however, that can be used as starting points: 1) Are potential, willing artists able to describe an object in detail after examining it carefully for five minutes, then closing their eyes and remembering it? 2) Are they able to trace with their finger an intricate outline of an object while looking at the object, and not their finger? These two skills are practiceable, learnable, and are the basic characteristics of the right hemisphere shift. They are essential to drawing, and, once they are learned, all that remains is practice.

3) Practice presupposes motivation. Why should anyone learn to draw, anyway? What good is it? The literacy worker should establish a practical value for artistic ability compatible with motivational values that have been established for the literacy program itself.

4) All examples of Western illustrations in the literacy workers' possession should be hidden or thrown away. Our insistence that materials we publish should 'look good' might very easily take precedence over what the *people* want. This will be especially easy for people who are artistically active themselves. Even if the people are already familiar with art forms and illustration from outside their culture, it should be downplayed. Anything they do on their own is more valuable than anything that can be brought in from the outside.

V. Conclusion

Anyone who does literacy work has many factors to consider. So many, in fact, that some considerations are likely to fall by the wayside. The use of pictorial material in the literacy program is not one of the things that should meet this fate. Art is a powerful tool, at least as powerful as the printed word; it should not be a careless afterthought on the order of "well, this might look nice on this page". Too many literacy materials have been produced with pictures traced out of a clip art book or drawn by an expatriate artist. If literacy work really does aim to help a people to be more culturally, nationally, and spiritually aware, then it should give them every opportunity to be who they really can be culturally, spiritually, and yes, even artistically.

Figure 2

The **Pintupi** people of Central Australia have a highly symbolic (or some prefer to call it representational) art form. A circle, for example, may represent any roundish object, i.e., a hole, a tree, a fire, a nest, etc. If a Pintupi wished to illustrate a goanna on a nest of eggs, it would look something like this:

Or a fire at which two men are standing and one sitting like this:

Walbiri

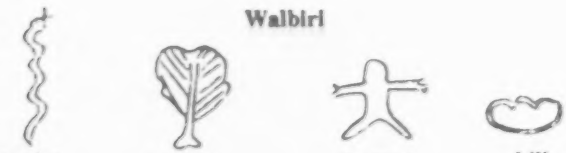
Tree	Human	Yam	Hill
wagilbiri tree	dead man (njunu)	small yam (wabadi)	conical hill

*slightly simplified from the original

Discontinuous Meaning Ranges....Walbiri

circular path	straight path	winding path	cave	"actor", (sitting, standing)
waterhole			hut	
fruit (e.g. congalberry	straight tail (as kangaroo)	winding tail (e.g. possum)	(arched) line of trees	human
fire	spear	snake	etc.	kangaroo (ancestor)
yam (e.g. wabadi)	tree (trunk)	lightning		etc.
tree (base)	backbone	etc.		
etc.	etc.			

Walbiri



snake tree human hill

Figure 1a. Elementary Visual Categories

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REPLY TO "LET SPIDER TEACH IT"

Darrel L. Kauffman

Darrel L. Kauffman is beginning work in literacy and Scripture in use with the Australian Aborigines and Islanders Branch of SIL. He and his wife Laurie work in the Torres Strait of Australia with the speakers of Kala Lagaw Ya.

I would like to respond to Ursula Wiesemann's article, 'Let Spider Teach It', on page 48 of *Notes on Literacy*, No 64. While I was reading this article, two things came to mind.

The first thing was that folk tales and legends are often useful and interesting sources of reading materials. There is an axiom, and I believe it holds true here, that the things people spend the most time talking about are either the most important or the most interesting to them. Wiesemann, in her article, made the comment that animal stories are a nightly diversion around the fire. Thus there is a ready source of interesting materials for reading.

Reading, if I am correct, is not viewed as 'work' in most cultures, but is categorized with activities such as telling stories around a fire in the evening. Therefore, materials which use topics similar to those that are talked about in informal settings might be more readily accepted. Of course one has to be careful that reading doesn't get classified solely as a source of fun and frivolity because serious literature, such as the Scriptures, would then be considered out of place as reading material.

Folk tales can also be a means to introduce new ideas into a culture. This has been done by Dr. Joseph Bastien of the University of Texas at Arlington. While Dr. Bastien was working among the Aymara people of Perú, diarrhea was a serious problem among the young children. Other techniques had not worked to convince the mothers that they should feed the children with diarrhea, Oral Rehydration Formula. The idea of using a story patterned after one of the Aymara legends was developed. In the story the mountain had an issue and was dying, so condor flew from site to site and gathered all of the ingredients needed to make the formula (in the proper portions), prepared the formula, and healed the mountain. This fit very closely with traditional Aymara beliefs as their healing ceremonies often require a previous gathering of various items from different places. Apparently this was then accepted and the women

began to give their children Oral Rehydration Formula when they developed diarrhea.

The second thing that came to mind, and for me the most exciting, was the richness of the material that was discovered by using Spider as a character in the primer series. Throughout many areas of Africa Spider is a main character in myths and legends. Often he fills the role of a 'trickster' in these stories. Edward Norbeck *(Religion in Primitive Society,* 1961*)*, in the context of the North American Indians from the Great Plains and west, says about tricksters that

> "He might help man and other supernatural beings or might deceive them. Sometimes virtuous, he is also wicked. Many myths tell of his seduction of women, and he is capable of such misdeeds as incest. Supernaturally clever in a scheming, deceptive way, he tricks his companions so that he may win races or eat all their food; disguises himself to seduce women, tricks mothers into eating their own children, and feigns death to catch game. But he is also a numskull who does such stupid things as dive into water for reflected food which he himself is carrying, joins the bulrushes dancing in the wind and, unwilling to stop until they stop, sways to and fro in an unremitting wind until he drops from exhaustion." (p. 78)

In the stories, the trickster is often responsible for giving to man the things that other gods have withheld, such as fire, sources of food, and animals. Sometimes he does this out of spite to the other gods, other times out of benevolence to man, and sometimes as a result of bungling some personal scheme for his own benefit. In his adventures he also reemphasizes the importance of cultural norms against things such as incest and unfaithfulness. It is interesting that not only did the stories use Spider, but they also fit him into his role of trickster as he attempts to marry Chicken so that he can eat her. Perhaps this is why Wiesemann was told, "Spiders can do anything."

BOOK REVIEW

Stringer, Mary D. and Faraclas, Nicholas G. 1987. **Working together for literacy.** Wewak, Papua New Guinea: Christian Books Melanesia Inc. Reviewed by Jan Allen.

A book that tells in detail, step by step, how to plan and carry out an interesting literacy program – how welcome it is! It fulfills the promise given on the cover by truly being *a guidebook of local language literacy programs.*

The book is primarily aimed at the educated Papua New Guinean who wants to be involved in a literacy program for his or her home area. The type of program in focus is a one year vernacular school for children who have not yet started school in the national language. The authors recommend the use of the book for adult literacy programs as well.

The book of 215 pages is divided into four chapters. Chapter One, 'Local language literacy and developing countries,' deals with solving literacy problems through the use of the Local Language Literacy Program (LLLP) through its two parts, the Multi-strategy Method and the Community Framework. The rationale for the use of the two tracks in the Multi-strategy Method is convincingly presented – the foci of the Storybook Track being fluency, comprehension and creativity and the foci of the Workbook Track being the mastery of reading and writing skills.

Chapter Two, 'The Multi-strategy Method and how to use it,' explains in detail the ideas behind the Multi-strategy Method and how to teach the two tracks. The material is presented in such a way that it can be used for the lectures and practice sessions of a teacher training course. For this purpose, it would be used with the detailed teachers' guide at the end of the book.

The different approaches used by the two types of teachers – the Story Track and the Workbook Track – are detailed. A list of materials needed by each type of teacher is given. The number and types of booklets that need to be prepared are enumerated; at the end of the book guides for writing the booklets are given. Also given are very detailed instructions as to the various activities used by each type of teacher.

The LLLP is planned as a one year program with four terms of ten weeks each. The book gives plans to carry the teacher through the entire forty weeks.

An important strength is the clear detailing of exactly how to go about all facets of the program. The person who has had literacy or teacher training should be able to use it very well as a complete program planning guide. The person who has not had that sort of preparation will probably need guidance from a trained person, called in the book, 'an experienced worker.'

Chapter Three, 'The community framework and how to use it,' is the Coordinators' Guide for LLLP. The Coordinator is to come from within the language community. He or she has the most important role in the setting up and carrying out of the program with only occasional help from an Experienced Worker. Emphasis is given to the importance of the local community itself in preparing for and funding the program.

The Coordinators' Guide details all the many steps the Coordinator needs to take to prepare for the program. He is told exactly what to do on two preparatory tours of communities that may want to be involved in the program. A very detailed schedule for a six weeks teacher training course is also given. The Coordinator is given instructions as to how to check the teachers and their materials and to test the students after the program is underway.

Section Six of this chapter gives valuable ideas on Open Classes and Bridging Classes. Open Classes give new literates a chance to maintain and further develop their skills. Bridging Classes are special Grade One classes which should be set up for children who have completed the LLLP and therefore need to continue building their reading and writing skills [to the national or regional language] rather than learning to read and write again.

Section seven of this chapter gives brief guidelines for the Experienced Worker who assists the Coordinator at specified times and in specific ways.

Chapter Four, 'The local language literacy program in practice,' presents a brief description of the Multi-strategy Method as it has been carried out in the Enga Province of Papua New Guinea, and the Community Framework as carried out in the Oro Province of Papua New Guinea.

The last half of the book is taken up with guides and sample pages which should be extremely useful in preparing all the various student books and the teachers' guides. Also included are a survey guide, a silkscreen building guide, and an alphabet making guide. One drawback to this section is that the model pages were not numbered and therefore a particular model may be difficult to find. This, however, is a small defect in a work so ambitious and so well carried out.

This book should be an extremely helpful resource for any literacy worker and/or community who want to use the Multi-strategy Method. And even those who do not wish to use the complete method will find many helpful tips for any literacy program.

TOPICS IN WHICH OUR READERS ARE INTERESTED

Do any of our readers have ideas about the following subjects? We have had suggestions from our readers that these topics be covered in NOL.

1. Reading Fluency. How about an article on the 'how to's' of this, and/or an annotated bibliography on source materials! We'd all appreciate it!

2. Teacher Training. Some of our readers would like to have general information on how to teach teachers. General articles , and/or an annotated bibliography on the subject would be very welcome! Some topics which would be found helpful, for example, are: How do you deal with fast and slow learners in the same class?, How do you determine how much to put into a lesson (i.e. not overloading but yet challenging the students)?, general tips on classroom manner, etc.

We'll appreciate tremendously articles on these subjects. Thank you!

Notes for contributors: Readers are invited to submit letters of comment and/or publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 W. Camp Wisdom Rd., Dallas, TX 75236.

Computer media: Contributors are encouraged to submit copies of their manuscripts on computer media (MS-DOS format preferred) along with a paper copy of the manuscript.

Notes On Literacy

Vol. 18.1 1992

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with the literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 W. Camp Wisdom Rd.
Dallas, Texas 75236
U.S.A.

EDITOR: Olive A. Shell, Ph.D.

ISSN 0737-6707

ORTHOGRAPHY REFORM IN AMELE: PART TWO

John R. Roberts

The first three chapters of this article, with biographical sketch of the author and references, were published in NOL 17.4. The subject of Chapter Three was Graphemic Representation of Phonemes.

John Roberts and his wife have been working with the Amele people of Papua New Guinea since 1978. For further details, see the foreword in Orthography Reform in Amele, Part One, NOL 17.4.

IV. Logographic Representation of Words
- A. Clitic Type Elements
- B. Compound Forms
- C. Word Breaks
- D. Phonological Criteria for Word Determination
- E. Grammatical Criteria

V. Decisions of the AOC on Logographic Representation
VI. Conclusion
VII. Notes
VIII. References

IV. Logographic Representation of Words

The problems of logographic representation concern where to make word breaks with certain forms. Firstly, with certain clitic type words such as postpositions, conjunctions, sentence particles, articles, emphatic words, negative particles, demonstrative pronouns and even adjectives, Amele speakers write them either attached to a preceding element or not. So the problem here is to decide what convention should be adopted for these word types. Should they be written attached to a preceding element or not? At the moment writers are inconsistent regarding these forms, and also the convention is inconsistent in the Amele literature. Related to this there are also cases where various compound forms can be joined or not. Secondly, with certain verb forms some Amele writers prefer to make a word break within the verb, and this practice has also been observed in the hymn book, for example. So the question to decide here is which verb forms, if any, should have word breaks within the verb? Also with respect to word breaks there is the question of whether reduplicated forms should be written as one word or two.

No attempt was made in Roberts (1987) to determine the nature of the orthographic word in Amele since this was considered to be beyond the scope of the grammar. It is the purpose of this article, therefore, to describe how the conventions for determining what constitutes an orthographic word in Amele were decided upon.

As already mentioned it is often difficult to decide what constitutes an orthographic word in any given language. The notion that words form a phonological and grammatical unit and can be represented orthographically as such appears intuitive cross-linguistically. For example, Sapir (1921: 33-34) noted: 'Linguistic experience, both as expressed in standardized, written form and as tested in daily usage, indicates overwhelmingly that there is not, as a rule, the slightest difficulty in bringing the word to consciousness as a psychological reality. No more convincing test could be desired than this, that the naive native, quite unaccustomed to the concept of the written word, has nevertheless no serious difficulty in dictating a text to a linguistic student 'word by word' and Robins says (1980: 149) 'But diverse experience goes to show that native speakers have an intuitive awareness of word-like entities in their own language, whether written or not, to a greater extent than they have of other grammatical elements and structures set up by the linguist.' Bloomfield (1935: 177-81) has also described the word as the 'minimum free form.' However, there are theoretical problems concerning word identification and definition and they relate directly to determining the orthographic word. These problems concern deciding whether a particular word-like unit has the status of being a word or not. In English, for example, are *a* and *the* of the same status as words like *dog* and *cat*? They also concern deciding where to place word boundaries. In English again, for example, are the following nominal compounds one word or two: *bee-sting*, *earthquake*, *firing squad*, *haircut*, *birth control*, *dressmaking*, *fox hunting*, *gamekeeper*, *language teacher*, *call girl*, *drawbridge*, *cooking apple*, *drinking-water*? Orthographically they are represented diversely as one word or two words, or two words joined by a hyphen when, in fact, grammatically they all form single word units.

A number of linguists, for example Robins (1980), Lyons (1968), and Matthews (1974), have distinguished three main senses of the term 'word'. Firstly, there is the phonological word, also termed the word-form. The boundaries of the phonological word are determined by phonological criteria such as stress placement. These linguists would identify the orthographic word primarily with the phonological

word since they are both physical, objective realizations. Secondly, there is the grammatical or morphosyntactic word. The morphosyntactic word is a unit that functions in the grammar of the language. This notion assumes that there is a word level in the grammatical structure of the language and that the word is the same kind of theoretical unit as sentence or morpheme. Thirdly, there is the lexeme. The lexeme is an abstract unit which refers to the common or base form of the word that can be extracted when a set of forms are variations within a paradigm, such as *show, shows, showed, shown, showing.* It is interesting that all of these linguists would discount any definition of word based on traditional or notional ideas such as 'units of meaning', for example Robins (1980: 149), "Definitions of the word unit have not been lacking, but those relying on nonformal, extragrammatical criteria such as 'possessing a single meaning' or 'conveying a single idea' are of little value." In the case of defining the orthographic word in Amele I found that where the phonological, morphosyntactic and semantic criteria all converged there was no difficulty in defining the orthographic word but where these criteria did not converge it was usually the 'meaning' criterion that was decisive in defining the orthographic word.

A. Clitic type elements

The clitic type elements where it has been observed that writers join these to preceding elements are as follows:

There are five simple **postpositions** each of which has no restriction as to the element which must precede it. These are *na* 'at/in/on/with/of', *ca* 'with/add/have/at/in/towards', *nu* 'for/so/about', *dec* 'from' and *we* 'like/able'. There are three compound postpositions which have an obligatory preceding element in each case. These are *dodoc* 'self', which must be preceded by a personal pronoun, *sec* 'way' and *hen* 'way', which must be preceded by a demonstrative pronoun. Postpositions are nearly always written attached to a preceding element. Examples are given in (32).

(32)

ijana	'my'	hugiannuca	'and so he will come'
jobonna	'to the village'	ijadodoc	'myself'
ijaca	'and/with/to me'	isec	'this way'
amegca	'with his eye'	euhen	'over there'
anadec	'from where?'	cinigwe	'seems like'

mahanadec 'out of the ground' hocwe 'able to come'
hugiannu 'so he will come'

Conjunctions can have a subordinating or coordinating function. They are *fi* 'if', *mi* 'if', *fo* 'or' and *qa* 'but'. Conjunctions are nearly always attached to a preceding element and in fact *fi* can be incorporated into the medial form of the verb.[9] Examples are given in (33).

(33) hugianfi 'he comes' ahulfo 'or coconut'
qeefi 'if not' ijaqa 'but I'
hufig 'if I come(SS)' houbmiqa 'but if he had come
houbmi 'if he had come'

There are ten **sentence particles**[10] that can be attached to the end of the sentence to express various notions of illocutionary force. *da* 'contra-expectation/conditional obligation', *dain* 'apprehension/warning', *do* 'encouragement/exhortation', *fo* 'information question', *fa* 'dubitive', *le* 'permissive', *ijom/om* 'assertive', *mo* 'supplicative', *nu* 'hortative' and *nu* 'habitual'. These particles are nearly always attached to the preceding element, usually the verb, as in (34) for example.

(34) wa honda 'nevertheless it did rain'
mala qoumda 'you should have killed the chicken'
qetitecdain 'lest I cut myself'
wa hugiando 'it is going to rain'
eu ihocfa 'maybe that is enough'
uqa hoiafo 'did he come?'
qa qoiaijom 'he really beat the dog'
hina nuugale 'you may go'
sab itigamo 'please give food'
uqa honanu 'he always comes'
ege belecnu 'let us go!'

The **indefinite article** *oso* is often attached to the preceding element, as in (35) for example.

(35)	meloso	'a boy'	inoso 'whoever'	
	danaoso	'a man'		

Emphatic words such as *bahic* 'very/really', *dih* 'just', *himec* 'only', *gul* 'own/self' are often attached to a preceding element, as in (36) for example.

(36)	mebahic	'very good'	euhimec	'only that'
	ijadih	'just I'	amigul	'my own eyes'

The **negative particle** *qee* is often attached to a preceding element which it qualifies, as in (37) for example.

(37)	caqee	'without'	ihocqee	'unable'
	meqee	'no good'	weqee	'not like'

The **demonstrative pronouns** *i* 'this' and *eu* 'that' are often attached to a following personal pronoun or anaphoric element, as in (38) for example.

(38)	iage	'these'	iedi	'like this'
	euage	'those'	eudi	'like that'

Occasionally **adjectives** are attached to another element in titular forms, especially when the adjective is placed before the modified nominal to indicate a specific instance of the item. The examples in (39) are taken from the hymn book.

(39)	kisgun	breath forbidden	'Holy Spirit'
	deelben	day big	'judgement day'
	meje	good talk	'the gospel'

B. Compound forms

There are various compound forms where Amele writers are inconsistent as to whether they write them joined or not. This same inconsistency also appears in the hymn book. The main examples are:

(i) **Compound verb phrases** constitute a type of verb phrase where a copula type of verb such as *qoc* 'hit' or *mec* 'put' is preceded

by a nominal or adjectival element to form a compound expression[11], as in (40) for example.

(40)	aig qoc	seed hit	'to bear fruit'
	aneg qoc	eye hit	'to be dazzled'
	me qoc	good hit	'to bear fruit'
	cal mec	? put	'to die'
	wal mec	rainbow put	'to become ripe'
	ihoc mec	enough put	'to practise'

(ii) **Compound noun phrases** constitute a type of noun phrase where two nominals form a compound expression, as in (41) for example.

(41)	cabi gel	garden fence	'year'
	man wag	bird canoe	'aeroplane'
	halu je	vine talk	'radio antenna'
	mel gah	boy fly	'twins'
	maha gemo	ground middle	'outside'
	dana caja	man woman	'people'

C. Word breaks

The problems of where to make word breaks applies to reduplicated forms and verbs. The nature of the orthographic problems relating to word breaks will be discussed in Section V.C and the solutions adopted by the AOC are presented in Section VI.

Reduplicated forms: Reduplication has a range of forms and functions in Amele and a more detailed account is given in Roberts (1991a). For the purposes of orthographic representation however, only the type of reduplication that involves reduplication of a whole word is problematic. The function of this type of reduplication is derivational in that a new word is formed by the reduplication process. It is possible to reduplicate all the different word classes in Amele including words that carry inflection, such as inalienably possessed nouns and verbs. Examples are given in Table 10. For monomorphemic words Amele speakers normally write the reduplicated form as one word, but for the inflectional words Amele speakers normally write them as two separate words.

Table 10. Reduplicated Words

Nouns (nonpossessed):

jo	'house'	jojo	'houses'
bagac	'leaf'	bagacbagac	'thin'

Pronouns:

oso	'one'	osooso	'anyone'
ana	'where'	anaana	'wherever'

Adjectives:

me	'good'	meme	'very good, many good things'
nag	'small'	nagnag	'very small, many small things'

Postpositions:

ca	'add, with'	caca	'alike'
na	'in, at'	nana	'in every one, at every place'

Possessed Nouns:

cotig	'brother'	cotigcotig	'brothers'
cebinag	'sibling of opposite sex'	cebinagcebinag	'brother and sister'

Verbs:

fec	'to see'	fecfec	'seeing'
doc	'to know'	docdoc	'knowing'
feceb	'he looked-DS'	fecebfecebec	'to look at each other'
qocob	'he hit-DS'	qocobqocobec	'to hit each other'
	qetudocob		'he cut him-DS'
	qetudocobqetudocobec		'to cut each other's

Verbs and word breaks: It has been noticed that for certain verb terms it is possible for Amele speakers to insert word breaks in the written form. This occurs in various kinds of written material as well as in the hymn book. Again there is inconsistency since for any given form it can appear with or without a word break. So this is another area of the orthography where a particular convention needs to be established and then adhered to by all Amele writers. The verb forms which can have word breaks are as follows:

(i) **Serial verbs** comprise two or three verb stems with only the final verb stem in the series carrying the verb morphology. Serial verbs can describe a sequence of closely related actions or the final verb stem in the series can have one of several specialized functions such as (a) add an aspectual meaning, (b) have a copular function and add no extra meaning, for example the verbs *qoc* 'hit' and *mec* 'put' normally have this function, (c) carry object markers where the other verb(s) in the series are of a category which cannot carry object markers, and (d) add a directional meaning in the case of motion verbs. Serial verb constructions are usually written with a word break between the verb stems,[12] as in (42) for example.

(42)		
	hu jena	'he comes and eats'
	mani jeia	'she cooks and eats'
	ji figen	'I will taste and see'
	ahu ehadi tigian	'he will take them up'
	du cuhadogina	'they know well'
	cehi hedoin	'they finished planting'
	nui bilimeig	'they continued to go(SS)'

(ii) A **verb with an object marker** is often written with a word break. In the examples in (43) the object marker is underlined.

(43)		
	cahahac <u>q</u>imei	'he rescues us(SS)'
	fa<u>n</u>in <u>te</u>tegin	'as they deceive me'
	di <u>te</u>ceb	'he pulls me(DS)'
	tem <u>hi</u>gian	'he will test you'
	cesul <u>ad</u>aga	'help them'
	ma <u>ad</u>en	'he said to them'

(iii) **Impersonal verbs** normally indicate a change of physiological or psychological state. Subject agreement is always third person singular and the experiencer of the change of state is marked on the verb by object agreement. There are two basic types of impersonal verb. With one type there is a nominal element followed by verb agreement. With the other type there is a nominal or adjectival element followed by the verb *qoc* 'to hit'. This second type is similar to the compound verbs described above except that the verb agreement configuration is different and whatever convention is

applied to them would be applied to this type of impersonal verb. In the case of the first type of impersonal verb the nominal element can be an NP with distinctive elements or an inalienably possessed noun which itself takes distinctive person and number morphology. This type of impersonal verb is nearly always written with a word break, as in (44) for example.

(44)	wen tena	'I am hungry'
	dain higian	'you will be in pain'
	majani tena	'I am ashamed'
	cucui adigian	'they will be afraid'
	wa gab dona	'he is thirsty'

(iv) **Verbs with stems of two or more syllables** are often written with a word break between the stem and the verbal suffixation regardless of whether there is an object marker present or not, as in (45) for example.

(45)	galal ena	'it is drying'
	qelel owain	'they will not tremble'
	cucui oqagan	'they will fear'
	cacagan eia	'he spoke in his sleep'

(v) **Verbs which happen to have a vowel stem-final** are often written with a word break between the stem and the verbal suffixation, as in (46) for example.

(46)	sa egina	'they are telling'	mele eceb	'he believes(DS)'
	uta eia	'he called'	celebo egina	'they are happy'

With respect to word breaks occurring within verbs there is a set of verbs to which this does not apply in a straightforward way. These are verbs that can be analyzed as having a stem comprising just a single consonant and are illustrated in Table 11. Where these verbs do not have object agreement it is not possible to separate the stem from the verb agreement orthographically. The infinitive form, the third person singular today's past tense form, and the serial verb stem form are given in Table 11 to show how each of these verbs basically has a single consonant stem. Some of these verbs are irregular as to how they take object agreement and third person singular and plural

object formation is also illustrated in Table 11 for those verbs that can be transitive. The irregularities are various. For example *cec* and *fec* form completely different stems whereas with *qoc* second and third person dual and plural object markers form a circumfix around the verb stem and the third person singular object marker *-ud* is completely absorbed in the stem.

Table 11: Verbs with Single Consonant Stems

INF		TOD.P	SER	3S.DO	3P.DO
b-ec	'to come up'	be-ia	b-i		
c-ec	'to have sex'	ce-ia	c-i	can-doia	can-adeia
d-oc	'to know'	do-ia	d-u		
f-ec	'to see'	fe-ia	f-i	feci-doia	feci-adeia
h-oc	'to come'	ho-ia	h-u		
j-ec	'to eat'	je-ia	j-i	je-udoia	je-adeia
j-oc	'to wash'	jo-ia	j-u	jo-udoia	jo-adeia
l-ec	'to go (near)'	le-ia	l-i		
m-ec	'to put'	me-ia	m-i	m-udoia	m-adeia
n-ec	'to come down'	ne-ia	n-i		
n-oc	'to go down'	no-ia	n-u		
q-oc	'to hit'	qo-ia	q-u	qoia	a>q<eia
t-ec	'to go up'	te-ia	t-i		

These then are the main logographic problems of word break assignment. In the next two sections the various phonological and morphosyntactic criteria that can influence word break assignment in the orthography will be examined before proceeding to the solutions adopted by the AOC.

D. Phonological criteria for word determination

There are several phonological criteria that can influence word-break assignment and these will be discussed in turn.

(i) **Stress.** The phonological word in Amele is defined in Roberts (1987: 345) as "a rhythm unit having one major stress placement, the physical manifestation of stress being relatively greater intensity often accompanied by relatively higher pitch." It is also stated in Roberts (1987: 345) that "In general the boundaries of phonological and grammatical words coincide."

The stress pattern defines the shape of the phonological word. There are two basic types of stress pattern in Amele. One, which is wholly predictable and determined exclusively by phonological criteria, applies to monomorphemic words and the other, which is much less predictable and determined more by morphosyntactic criteria, applies to polymorphemic words such as inalienably possessed nouns and verbs.

The stress pattern for monomorphemic words is determined by the ordered rules [1] and [2] such that [2] applies only if [1] has not applied. Informally these rules state that primary stress is placed on the first closed syllable in the monomorphemic word otherwise, if there is no closed syllable in the word, on the first syllable. A monomorphemic word can have a maximum of three syllables and for the purposes of stress placement a diphthong can count as a closed syllable if there are no other syllables in the word closed by a consonant. Where there is more than one closed syllable (or equivalent) there is a hierarchical application of rule [1] as indicated in the brackets. So the environment of CC will take most precedence for stress placement whereas the environment of [-syll] will take least precedence. Both [1] and [2] read the word from left to right.

[1] V -> [+stress] / ___ { C # < CC < [-syll] }

[2] V -> [+stress] / # (C) ___

Some examples are given in (47) to illustrate these stress rules.

(47)	[du'æn]	/duan/	'cold'
	[ɪtɪ'tɔm]	/ititom/	'righteous'
	['ænse]	/anse/	'left hand'
	[jæ'wælti]	/jawalti/	'wind from the north'
	['dænbɛn]	/danben/	'village name'
	[seɪ'bʊl]	/seibul/	'war club'
	['nui]	/nui/	'island'
	['mæhə]	/maha/	'ground'
	['nɪfʊlə]	/nifula/	'species of beetle'
	['tɔɪə]	/toia/	'old'
	[bæ'saɪ]	/basai/	'surface'

These stress rules can distinguish an item that is a phonological word from one that is not. The items in (48) are single phonological words since they have one primary stress placement. The items in (50), on the other hand, are instances of two phonological words, since they have two positions of primary stress placement, and in fact are reduplicated nominal forms.

(48)	['dɔdo]	/dodo/	'story'
	['gɪgi]	/gigi/	'grass'
	[ɔ'dɔd]	/odod/	'garden path'
	[u'dud]	/udud/	'species of ginger'
(49)	['aɪs'aɪs]	/aisais/	'danger'
	['fɔlo'fɔlo]	/folofolo/	'lungs'
	['hig'hig]	/highig/	'Doria's hawk'
	['ug'ug]	/ugug/	'New Guinea eagle'

There are other phonological indicators of word break possibilities in some of the items in (48) and (49). For example with ['dɔdo] only the final vowel has a word final lax quality, whereas with ['fɔlo'fɔlo] there are two vowels with a word final lax quality. With respect to logographic representation, while native speakers of Amele have demonstrated in their writing that it is possible to write the items in (49) with or without a break in the middle, they have also demonstrated that it is not possible to write the items in (48) with a medial word break. This is illustrated in (48a) and (49a) and shows that Amele speakers do understand where word breaks are possible although a standard convention has not been adopted in some cases.

(48a)	/dodo/	dodo	*do do	'story'
	/gigi/	gigi	*gi gi	'grass'
	/odod/	odod	*od od	'garden path'
	/udud/	udud	*ud ud	'species of ginger'
(49a)	/aɪs#aɪs/	aisais	ais ais	'danger'
	/folo#folo/	folofolo	folo folo	'lungs'
	/hig#hig/	highig	hig hig	'Doria's hawk'
	/ug#ug/	ugug	ug ug	'New Guinea eagle'

For polymorphemic words the situation with stress placement is more complex and morphosyntactic criteria play a greater role than phonological criteria. Stress placement varies according to the particular paradigmatic form of the verb or possessed noun. So for some verb forms, viz. present tense, today's, yesterday's, remote and negative past tense, future tense and simultaneous action, stress is placed on the subject agreement marker, as in (50) for example.

(50)	[fɪ'ginə]	/fi + gi + na/	'I see'
	['figə]	/f + ig + a/	'I saw (today)'
	[fɛ'lɛm]	/fe + l + em/	'I did not see'
	[fo'wæsɪn]	/fo + was + in/	'they(2) will not see'
	[fɪfɪ'gɪn]	/fi + fi + gin/	'as I see(SS)'

For other verb forms, viz. habitual aspect, sequential action, counterfactual mood, and negative future tense, primary stress is placed on the essential operator in the verb, i.e. the aspect, mood or negative marker, as in (51) for example.

(51)	[fɔ'lɔsi]	/fo + lo + si/	'they(2) used to come'
	[fɛ'ʔɛmin]	/fe + ʔe + min/	'I saw(DS)'
	[feɪ'aʊn]	/fe + i + a<u>n</u>/	'he did not see'

With one verb form, the sequential SS form, the verb stem is stressed. This may be explained by the fact that with this form of the verb the verb morphology can be deleted to form a 'stripped down' serial verb. An example is given in (52).

(52)	['fimeɪk]	/fi + me + ig/	'they see(SS)'
	['fi]	/fi/	'they see(SS)'

Where there is an object marker in the verb this normally carries the primary stress regardless to which stress category the form of the verb belongs, as in (53).

(53)	[mæ'ædigə]	/ma + ad + ig + a/	'I said to them (today)'
	[mæ'ædɔlik]	/ma + ad + ol + ig/	'I used to say to them'
	[mæ'ædimik]	/ma + ad + im + ig/	'I said to them(SS)'

For the inalienably possessed noun forms there is a general stress rule such that primary stress is placed on the final syllable of the word regardless of the phonological shape of the word,[13], as illustrated in (54).

(54)	[ʔɔ'ti]	/ʔot + i/	'my brother'
	[ʔɔti'ge]	/ʔot + ige/	'our brother'
	[ʔɔti'ɛl]	/ʔot + i + el/	'my brothers'
	[ʔɔti'geɯl]	/ʔot + ige + il/	'our brothers'

As mentioned at the beginning of this section it is not always the case that the phonological word coincides with the morphosyntactic word. This is especially true of postpositional phrases where there is often one primary stress placement for the whole phrase. Examples are given in (55).

(55)	a.	['mæhə]	/maha/	'ground'
	cf.	[mæ'hænə]	/maha na/	'on the ground'
	b.	['jo]	/jo/	'house'
	cf.	['jɔnə]	/jo na/	'at the house'
	c.	['ijə]	/ija/	'I'
	cf.	[i'jænu]	/ija nu/	'for me'
	d.	[jɔ'bɔn]	/jobon/	'village'
	cf.	[jɔ'bɔndɛʔ]	/jobon dec/	'from the village'

(ii) **Vowel and consonant quality**

The [-high] vowels /a, e, o/ have lax alternates that occur only in word final position and this can often indicate the end of a morphosyntactic word, asə in (56) for example.

(56)	[mælə]	/mala/	'chicken'
	[fɛnə]	/fena/	'he sees'
	[me]	/mẽ/	'good'
	[ɛne]	/ene/	'here'
	[jo]	/jo/	'house'
	[ɔso]	/oso/	'one'

However, it is also the case that such lax vowels will assume a tense quality when phonologically bound to a clitic type word, as in (57) for example.

(57)	[fɛnæfi]	/fenafi/	'if he sees'
	[mɛbæhiˀ]	/mebahic/	'very good'
	[jɔnə]	/jona/	'at the house'

Certain consonants have allophonic variants that can occur in word-final position as illustrated in Tables 12.[14]

Table 12: Word-final consonant variation

Consonant phoneme		Word-final variant
/b/	->	[p]
/g͡b/	->	[p]
/g/	->	[k]
/j/	->	[j̊]
/w/	->	[v]

This variation can often indicate a word boundary, as in (58) for example.

(58)	[gælæpmɛnə]	/galab#mena/	'he decorates'
	[æmɛkmɛnə]	/ameg#mena/	'he keeps a lookout'
	[sivg͡bɔɪə]	/siw#g͡boia/	'he yawned'

(iii) **Vowel and consonant clusters**

Clusters of vowels that do not form diphthongs or clusters of consonants are often indicative of word boundaries, as in (59) for example.

(59)	[beævɛɪə]	/be#aweia/	'he carried by the mouth'
	[hɛjeɔɪə]	/heje#oia/	'he stole'
	[hæggbɔɪə]	/hag#g͡boia/	'he was sick'
	[ʔæhukmɛɪə]	/ʔahug#meia/	'it was smelly'

It is not always the case, however, that a consonant cluster indicates a word boundary since there are a limited number of

monomorphemic words in the language, mainly names, with internal consonant clusters, as in (60) for example.

(60)	/anse/	'left hand'	/jelso/	'village name'
	/danben/	'village name'	/misangul/	'man's name'
	/jawalti/	'north wind'	/gbalilna/	'village name'

At the end of this section it should be noted that there were several cases where the phonological word did not coincide with the morphosyntactic word. Specifically there were cases of overdifferentiation and underdifferentiation:

(a) The reduplicated forms in (50) have a stress pattern indicating two phonological words but are reduplicated forms which form a single morphosyntactic unit. The phonological pattern therefore overdifferentiates against the morphosyntactic pattern.

(b) The postpositional phrases in (56) form a unit of a single phonological word but are in fact a combination of a postposition and a nominal. The phonological pattern therefore underdifferentiates against the morphosyntactic pattern.

E. Grammatical criteria for word determination

No general definition of the grammatical word is given in Roberts (1987) although various operational criteria for defining the major grammatical word classes of noun, pronoun, verb, adjective and postposition are described (Roberts 1987:149-157). Other clitic type particles such as sentence particles, coordinating and subordinating conjunctions, indefinite article, emphatic words and negative particles, are described in various places in the grammar, viz. Roberts (1987: 74-75, 78-81, 88, 90, 98-99, 110-111, 323-324). In general terms the grammatical or morphosyntactic word could be defined in Amele as the minimal representative of the particular word class. So a noun is the minimal representative of the class 'noun', a verb is the minimal representative of the class 'verb', a postposition is the minimal representative of the class 'postposition' and so forth.

Concerning the principle of logographic word breaks two grammatical principles are relevant in determining the nature of the orthographic word in Amele, grammatical dependency and interruptability.

The principle of **grammatical dependency** applies primarily in defining the orthographic word with respect to elements that can be joined to a preceding element. Of the major word classes, nouns, pronouns, verbs and adjectives are grammatically independent in the sense that a single noun, pronoun, verb or adjective can function as the head of a phrasal constituent and can also be the sole realization of that constituent. So a noun, pronoun or adjective can occur as the sole realization of the NP and the verb can occur as the sole realization of the Verb Phrase (VP)[15] or Sentence. The word class postposition, however, is grammatically dependent. While a postposition must occur as the head of the PP it cannot occur as the sole realization of the PP. A noun, pronoun, adjective, NP, PP or S must occur as the object of the postposition. For example:

(61)	a.	jobon dec house from	'from the village'
	b.	uqa na 3S of	'his'
	c.	ben ca big add	'bigger'
	d.	dana caub nu man white for	'for/about the white man'
	e.	maha na dec ground in from	'from out of the ground'
	f.	age due-gi-na eu na 3P dance-3P-PRES that at	'at (where) they dance'

It is also the case that postpositions cannot be stranded by movement rules but rather they must accompany the object element in the movement process. For example in a nonecho question it is normal for the questioned element to be moved to the preverbal focus position. Where the questioned element is a PP, such as a comitative phrase, the whole phrase must be moved.

(62) a. Hina ___ jobon in ca nue-si-a?
2P village who with go-2D-TOD.P

'Who did you go to the village with?'

b. *Hina ___ ca jobon in nue-si-a?
2P with village who go-2D-TOD.P

Another example of movement would be in the case of the relative clause (RC). The relativized element must occur as the first element in the RC. If this is a PP, say an instrumental phrase, the whole phrase must be moved.

(63)

a. Sapol na ija ___ ja qatan-ig-a eu ene bil-i-a.
axe with 1S firewood split-1S-TOD.P that here sit-3S-TOD.P

'The axe that I split the firewood with is here.'

b. *Sapol ija ___ na ja qatan-ig-a eu ene bil-i-a.
axe 1S with firewood split-1S-TOD.P that here sit-3S-TOD.P

The postposition is grammatically dependent but it is not an inflectional suffix like the agreement morphology on verbs and possessed nouns. Verb morphology such as subject/object person and number agreement, and tense, aspect, mood and negation suffixation can only occur as part of a verbal constituent. Likewise the possessed noun morphology indicating person and number agreement can occur only on the possessed noun. Verb and possessed noun morphology is therefore lexically bound to a particular syntactic category and forms a lexical constituent, i.e. a word, with that item. The postposition, on the other hand, is not bound to any particular syntactic category or, in fact, to any particular grammatical structure, being able to occur with words, phrases or sentences. Also, whereas the different verb and possessed noun suffixes mark particular grammatical categories, such as person/number or tense, and can mark only that category or combination of categories, a postposition usually has a range of semantico-syntactic functions. For example *ca* can indicate comitative, additive, instrumental, comparative, possessive, locative, allative and so forth. Even a postposition such as *dodoc*, which is lexically bound to a personal pronoun, i.e. it can occur only attached to a personal pronoun, has an emphatic function as well as a reflexive function.[16]

Postpositions are therefore analyzed as dependent words rather than lexically bound affixes. This can be further illustrated by the

fact that postpositions always occur outside of bound morphology, as in (64) for example:

(64)

a. wal-i-el ca
brother-1S-P with
'with my brothers'

b. qee cesul-ad-i-te-i-a<u>n nu
not help-3P.DO-PRED-1S.IO-3S-FUT<NEG>FUT for
'because he will not help them for me'

The fact that the postposition is a grammatically dependent word and forms an inseparable unit with its object constituent makes it likely that Amele speakers would want to represent it orthographically as attached to that constituent.

The same applies to conjunctions and sentence particles, since these items too can occur only with another constituent. This is normally a sentence, although conjunctions can occur with sentence substitutes and with nominals, as in (65) for example:

(65) a. Eu fi.. 'If that..'
that if

b. Qee fi.. 'If not..'
not if

c. Üqa jobon nu-i-a fo qee fo?
3S village go-3S-TOD.P or not or
'Has he gone to the village or not?'

d. ceta ca.. 'yams and..'
yam add

e. ceta fo.. 'yams or..'
yam or

In the case of the conjunctions, again where movement operates, the conjunction cannot be stranded, as in (66) for example.

(66)

a. Ija wa na no-co-min fi waga q-it-igi-an.
1S water in go down-DS-1S if crocodile hit-1S.O-3S-FUT
'If I go down into the water the crocodile will get me.'

b. Waga q-it-igi-an ija wa na no-co-min fi.
crocodile hit-1S.O-3S-FUT 1S water in go down-DS-1S if
'The crocodile will get me if I go down into the water.'

c. *___ fi waga q-it-igi-an ija wa na no-co-min.
if crocodile hit-1S.O-3S-FUT 1S water in go down-DS-1S

The situation with the article, emphatic words, the negative particle, demonstrative pronouns and adjectives is different, however. Each of these items can occur as independent words. So in (67a), for example, the indefinite article *oso* 'one', or the adjective *ben* 'big' or the demonstrative pronoun *eu* 'that' can occur as the sole representative of the NP, in (67b) an emphatic word *himec* 'only' can occur as the sole representative of the predicate in the equative clause, and in (67c) the negative particle *qee* 'not' can occur independently of the verb in the VP. In (65a) the demonstrative *eu* and in (65b) the negative particle *qee* can also occur as the sole representative of the sentence.

(67) a. Oso/Ben/Eu ho-Ø-na.
one/big/that come-3S-PRES
'Someone/The big (man)/That is coming.'

b. Eu himec.
that only
'That is all.'

c. Dana eu (qee) sab (qee) man-Ø-el.
man that not food not cook-3S-NEG.P
'That man did not cook the food.'

As to articles, emphatic words, negative particles, demonstrative pronouns and adjectives, it is much more likely that Amele speakers will construe them as independent words and write them as such.

The principle of grammatical dependency also applies to the various compound forms described under VB. In most cases the individual elements in the compound structure can also occur as free elements elsewhere. One exception to this is *calmec* 'to die', where *cal* does not occur as a free form and has no independent meaning. It would be predictable that for most compound forms Amele speakers would want to write the components as separate elements except in cases such as *calmec* which would have to be written as a unit structure.

The principle of **interruptability** in determining orthographic representation applies primarily to the verb forms described under section IV. C., Verbs and Word Breaks.

There are two types of inflected word in Amele: inalienably possessed nouns and verbs. Only with verbs, however, do Amele writers tend to insert word breaks. Both possessed nouns and verbs can occur as independent words in structure. Possessed nouns can occur as the sole realization of the NP and verbs can occur as the sole realization of the VP or S. In (68a), for example, *wali* 'my brother' is the subject NP and *cedadi* 'took them' is a verb functioning as a VP in a serial verb construction. In (68b) the verb word *nuia* functions as a complete sentence.

(68) a. Wal-i ced-ad-i nu-i-a.
brother-1S take-3P.DO-PRED go-3S-TOD.P
'My brother took them and went.'

b. Nu-i-a.
go-3S-TOD.P
'He went.'

Both possessed nouns and verbs are grammatically independent words but only with verbs is it possible to separate the verb

morphology from the stem grammatically. This is not possible with possessed nouns. This separation of verb morphology occurs in three ways:

(i) **Incorporation**

It is possible to incorporate certain elements within the verb itself. The emphatic word *bahic* 'very' and the negative particle *qee* 'not' can be incorporated in the verb, as in (69) for example:

(69) a. cesul-ade-ig-a
help-3P.O-3P-TOD.P
'they helped them'

b. cesul bahic ade-ig-a
help very 3P.O-3P-TOD.P
'they really helped them'

c. cesul qee ade-l-ein
help not 3P.O-NEG.P-3P
'they did not help them'

It is also possible to incorporate a numeral but in this case a serial verb construction is formed with the verb stem forming a separate VP marked by the predicate marker *-i* and the numeral forming a second derived verb in the serial construction which carries the verb morphology, as in (70) for example.

(70) cesul-ad-i lecis-ade-ig-a
help-3P.O-PRED two-3P.O-3P-TOD.P
'they helped them twice'

In one of the forms of the reciprocal verb the portion of the verb that contains the direct object morphology is reduplicated as a switch-reference clause chain type of construction and as such is incorporated within the verb. In (71), for example, the reduplicated object morphology indicates third person singular object, different subject following and third person singular subject. This part of the verb is always of the same form but the subject agreement which attaches to the whole reciprocal verb agrees in person and number with the reciprocal group, which is third person dual in (71a) and third person plural in (71b).

(71) a. cesul do-co-b do-co-b esi-a
help 3S.O-DS-3S 3S.O-DS-3S 3D-TOD.P
'they(dual) helped each other'

b. cesul do-co-b do-co-b eig-a
help 3S.O-DS-3S 3S.O-DS-3S 3P-TOD.P
'they(plural) helped each other'

(ii) **Free form**

It is possible for verb morphology to occur in a somewhat free form without being structurally attached to a particular verb stem. This can occur in reported speech constructions, as in (72) for example, where a fully inflected speech verb can occur preceding the quote with just verb morphology following the quote, (72a). Such free form verb morphology can also occur without a speech verb being present, as in (72b) for example.

(72)

a. Uqa ma-te-i-a, "Ija sab eu j-ig-a," te-i-a.
3S say-1S.O-3S-TOD.P 1S food that eat-1S-TOD.P 1S.O-3S TOD.P
'He told me, "I ate that food."'

b. Dana eu gad egi-na.
man that crazy 3P-PRES
'They say that man is crazy.'

'Free form' verb morphology can also occur with certain verb constructions where the 'verb' to which the morphology applies is actually a serial verb type of construction. In this construction it is not the case, as in a normal serial verb construction, that the verb morphology attaches to the final verb in the series since the final verb is also marked with the predicate marker *-i* as are the other verbs in the series. So the verb morphology is attached structurally to the whole verb series rather than just to the final verb in the series. This type of construction occurs with verbs describing iterative actions, as in (73a-b), and 'to and fro' actions, as in (73c-d). In this type of construction the verb morphology is actually functioning as a morphosyntactic clitic at the phrase level. However, it is a clitic comprising various verbal affixes.

(73)

a. gud-u gud-u cig-a
beat-PRED beat-PRED 3P-TOD.P
'they ran, i.e. they beat the ground repeatedly'

b. uta-i uta-i ei-a
call-PRED call-PRED 3S-TOD.P
'he called repeatedly'

c. ton-i tob-i cig-a
descend-PRED ascend-PRED 3P-TOD.P
'they went up and down'

d. l-i l-i h-u h-u ei-a
go-PRED go-PRED come-PRED come-PRED 3S-TOD.P
'he went to and fro'

(iii) **Expansion of stem**

With the impersonal verb forms it is possible to expand the nominal that seemingly functions as the stem of the verb. The nominal can be expanded by adjectival modifiers, as in (74a), or, if it is a possessed noun form, as in (74b), it will 'agree' in person and number with the experiencer-object NP. These expansion possibilities are strong evidence that for these forms the stem should be treated as a separate word orthographically and, in fact, this is how Amele speakers normally write these forms. The 'verb stem' in these impersonal verbs is probably best analyzed as an incorporated subject-NP which triggers third person singular subject agreement on the verb.

(74) a. dain ben bahic te-i-a
pain big very 1S.O-3S-TOD.P
'I was in great pain.'

b. maja-ni te-i-a
shame-1S 1S.O-3S-TOD.P
'I was ashamed.'

V. Decisions of the AOC on Logographic Representation

A. Problems:

The problems of logographic representation discussed above were also presented to the AOC, viz. attachment of clitic type words to a preceding element, joining of compound forms and word breaks in reduplicated forms and verbs. Their decisions were as follows:

(i) The AOC said that postpositions, conjunctions and sentence particles should definitely be attached to a preceding element. They explained that these are 'helping' words and otherwise have no independent meaning. They also cannot stand on their own.

(ii) The AOC were equally certain that articles, emphatic words, negative particles, demonstrative pronouns and adjectives should be written as separate words because these 'have their own meaning' and can stand alone in some circumstances.

(iii) The AOC decided that normally elements in compound forms should be written separately because they usually 'had their own meaning', although for some forms such as *calmec* 'to die', where the individual meaning of the components have been lost, it would be better to write them as unit words.

(iv) For reduplication of monomorphic words the AOC were sure they should be written as a unit form but were less clear about reduplicated polymorphemic words such as possessed nouns and verbs. Here perhaps the use of a hyphen would have been the best solution but there is a problem with using the hyphen in Amele to represent word breaks. The hyphen is already used extensively in the hymn book to indicate where pieces should be sustained. The AOC therefore decided that all cases of reduplication should be written as a unit form.

(v) With the question of whether to have word breaks in verbs, the AOC were unsure. For some cases, such as impersonal verbs, as in (44), the AOC were certain that there should be a word break between the verb stem and the verb morphology, the reasoning being that the stem often had 'an independent meaning' from the verb form

as a whole. Other cases where the AOC were sure word breaks should be indicated within the verb were where an emphatic or negative word was incorporated into the verb, as in (69), and where the reduplicated object agreement was incorporated into the reciprocal verb, as in (71). Here they could see that this was a case of 'a word within a word'. They could also see that the forms of verb morphology that indicated direct and indirect speech, such as those exemplified in (71), should be written as separate words because they really mean 'to say'.

However, for other cases the AOC were unsure as to whether there should be word breaks or not in the verb. In the case of serial verbs, as in (42) for example, sometimes it was appropriate to have a word break between the serial verbs and sometimes not. For *hu jena* 'he comes and eats' it would be appropriate to have a word break because these verbs are interpreted as describing two separate actions, i.e. two separate units of meaning, but for *ducuhadogina* 'they know well' it would be appropriate to write it as a word unit since it is interpreted as forming a single unit of meaning. The second verb qualifies the meaning of the first verb. For the cases of iterative type constructions, as in (73), the AOC felt that these should all be written as unit forms since they form single units of meaning.

For the other cases where Amele writers had been writing verb forms with a word break between the verb stem and the verb morphology, as in the cases of verbs with object markers, (43), verbs with multisyllabic stems, (45), and verbs with vowel final stems, (46), the AOC could see why this was happening. They could see that with these verb forms there was the possibility of having a word break between the stem and the morphology. However, they felt that writing a word break when there was no need to do so would be confusing when it came to reading back what had been written. So they decided that unless it was necessary to put a word break within the verb, as in cases of word incorporation for example, verbs should be written as single 'units of meaning' with the stem joined to the morphology.

B. Summary of the AOC's decisions

In summary the AOC decided to retain most of the existing orthography but make revisions and standardizations in the following areas:

(i) Revisions to graphemic representation of phonemes--Please see NOL 17.4.

(ii) Revisions to logographic representation of certain word forms:

Postpositions, conjunctions and sentence particles should be written as attached to the preceding element. Other word categories should not be written as attached to the preceding element.

The elements in compound forms should be written separately unless they do not have an independent meaning, in which case they should be written as a single unit form.

Reduplicated words should be written as a single word unit.

Verbs should be written with word breaks after the stem in the following instances, otherwise verb words should be written as single units:

(a) where the verb is an impersonal verb.

(b) where there is another word or phrasal structure incorporated within the verb word.

Serial verbs should be written as separate words if they form independent units of meaning, but if they form a composite unit of meaning they should be written as a single word unit.

VI. Conclusion

The purpose of the revisions to the Amele orthography was to produce an orthography that more closely matches native speaker intuitions about the phonemic and logogrammatical representation of the language. The revision proposals were based on careful analysis of the phonology and morphosyntax of the language and were mostly vindicated by native speaker reactions. Nearly all the proposals for revising the graphemic representation of phonemes were accepted and incorporated into the revised orthography. The only proposal of graphemic revision that was not accepted was with regard to the diphthongal sequences /ae/ and /ao/. The recommendation was that these forms were spurious and should be counted as the sequences /ai/ and /au/ respectively for the purposes of orthography. However, the views of the AOC that these sequences were not spurious were taken into account and the decision was to represent them orthographically.

With the proposals for logographic standardization, in most cases the AOC were quite certain as to how the Amele form should be represented orthographically. The issue of word breaks in verb forms was the only area where they were unsure what the best orthographic representation should be. In this case phonological and morphosyntactic criteria were in conflict. While the phonological criterion of stress placement indicates that a verb forms a single phonological word, the morphosyntactic criteria of interruptability and dependency indicates that a verb actually comprises two units: a verb stem and a clitic type unit of verb affixes.

It was interesting to see that it was the semantic criterion that a verb expresses a single unit of meaning which resolved the conflict between the phonological and morphosyntactic criteria for orthographic representation. This also applied to the serial verbs as to whether they should be written as single word units or multiple words. The AOC decided that serial verbs should be written as a single word unit if they form a single unit of meaning and that they should be written as separate words if they did not.

The semantic criterion also applied in the case of postpositions and conjunctions. Here again the phonological and morphosyntactic criteria were in conflict. Phonologically postpositions and conjunctions formed a single phonological word with the preceding element but grammatically they formed word units distinct from the preceding element. However, what decided the AOC to write these items as attached to their preceding element was the semantic criterion that postpositions and conjunctions have no independent meaning.

Contrast this with the AOC's decision to write words incorporated in words as separate items. This applied to the verb forms that incorporated certain adverbial elements such as *bahic* 'very/really' and *qee* 'not' and the impersonal verb forms that incorporated the subject, NP. The reason for writing these as separate words even though they occurred within another word was again because they could be perceived as a word with independent meaning. As a contrast to words within words it is also possible in Amele to have morphemes within morphemes. This occurs in certain verb forms as illustrated in Table 13 whereby the irrealis infix *-ʊ* can be incorporated within another morpheme. For (a) *-ʊ* is incorporated within the morpheme *-om* which is itself a portmanteau morpheme indicating remote past tense and second person singular subject. This combination produces the counterfactual, second person

form. For (b) *-u* is incorporated within the morpheme *-an*, 'future tense,' to produce the negative future tense morpheme. The point to note, however, is that this is incorporation at the morphemic level and there is no possibility of the *-u* morpheme being written separately.

Table 13. Morphemic Infixation of *-u* 'irrealis'

(a)	q-om	q-o<u>u</u>m
	hit-REM.PAST.2S	hit-PAST.2S<IR>PAST.2S
	'you hit'	'you should have hit'
(b)	q-og-an	q-og-a<u>u</u>n
	hit-2S-FUT	hit-2S-FUT<IR>FUT
	'you will hit'	'you will not hit'

One final point to discuss is why do Amele speakers write certain verb forms with the morphology separate, for example the verb forms with an object marker, multisyllabic stems and vowel final stems, and yet for reading purposes prefer them to be joined. The reason would seem to be that for reading purposes they are viewing the word as semantic units but for writing purposes they are forced to deal with the word more slowly and therefore view it on the phonological or morphosyntactic level. This would substantiate the views of Sampson (1985) that writing and reading are two different skills which require different types of orthography. He has suggested that the best kind of orthography for writing should be a fairly phonemic one, since in this process we concentrate more on the individual sounds of the language. For reading, however, he suggests that the best orthography is one that represents higher levels of meaning such as words or intonational phrase groups. For example the Chinese ideogram system would come close to representing the ideal reading system. Sampson, in fact, maintains that the orthography of English, for example, is at present a happy compromise between the demands of the different reading and writing skills. On the one hand, the English orthography represents the phonemes of English to a certain degree so it can be used for writing but, on the other hand, since it is such a poor representation of the English phoneme system, viz. only twenty-six characters for forty-six phonemes, each word (more or less) has to be learnt as a semantic unit and the English orthography forces us to read English as word units rather than phoneme units.

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In conclusion then this discussion of orthographic reform in Amele puts forward the case that semantic criteria such as 'units of meaning' can have just as significant a role to play in defining the orthographic word in language as formal phonological and morphosyntactic criteria.

VII. Notes (continued from NOL 17.4)

9. This phenomenon is discussed further in Roberts (1988a, 1988b).

10. Sentence particles in Amele are more fully described in Roberts (1990).

11. See Roberts (1987: 309-311) for more examples of these compound forms.

12. This along with the fact that each serial verb 'stem' has a final predicate marker *-i* would support the argument that serial verb constructions in Amele are in fact series of verb phrases.

13. There is some variation to this stress rule for first person singular forms. See Roberts (1987: 359-361) for details.

14. The justification for these analyses is given in Roberts (1987: 333-340).

15. See Roberts (1987: 154-156) for the criteria for distinguishing the category adjective from that of noun. See Roberts (1988b) for detailed arguments for a VP constituent in Amele.

16. The item *dodoc* 'self' is probably marginal between being a pronominal suffix and a postposition. It could be analyzed either way.

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ABSTRACT

Van Dyken, Julia Ruth. 1984. **What literacy teachers should know about language: An assessment of in-service training needs of reading acquisition teachers in southern Sudan using the Gudschinsky Literacy Method**. Ph.D. dissertation, Indiana University. 347 pages. (*Available from UMI, order # 84-17185*)

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A study was conducted to assess the training needs of Sudanese teachers of reading acquisition, with reference to what teachers should know about language. An analysis of students' reading miscues showed that reading acquisition must include learning (a) to recognize that language can be segmented, (b) to identify discrete units of language and (c) to associate meaning with the visual forms of language. The linguistic nature of these learning tasks suggested that the teaching task must include linguistic problem-solving, which is defined as identifying, evaluating and responding to student reading miscues on the basis of similarities and differences between spoken and written language.

Comparisons between actual and desired teaching practices showed that the teacher training task in Sudan must include two dimensions: linguistic problem-solving and modelling of the reading process. Some general patterns of teaching practices had emerged despite the uniqueness of each of the 57 teachers and 6 languages observed. These patterns had included (a) general dependence on following procedures prescribed as part of existing training courses, (b) minimal use of problem-solving approaches during interactive practices in the classroom, and (c) varying success in providing good models to learners for word and letter identification. The gap between actual and desired practices, particularly the limited use of problem-solving approaches by teachers, was used for inferring training needs.

Applications of a tagmemic framework tie the study together, interrelating form and meaning which were shown to be equally important. Naturalistic approaches, including class observation and open-ended interviews, were used in conducting the study, and the data were triangulated, whenever possible, to test for consistency.

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TRANSITION LITERACY WORKSHOPS IN THE PERUVIAN ANDES

Nancy Jean Loveland

This article was submitted to SIL as a contribution toward International Literacy Year.

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I. Introduction
II. The Ancash Situation
III. The Factors
IV. The Needs
V. A Solution--Theory
VI. A Solution--Practice
VII. Conclusion

I. Introduction

The Peruvian Andes consist of mountain ranges, valleys, flat plains, rivers, and high empty spaces; towns, villages, farms, and fields; Quechua, mestizos (Spanish speakers of Quechua ancestry), and Spanish, monolinguals, incipient bilinguals and coordinate bilinguals; rich, middle class, and poor; farmers, professionals, and small businessmen; a conglomerate of people and places.

People live on the valley floor in towns and cities and all up and down the sides of the valley in small, isolated hamlets. Quechua people also live in communities on the high plains and plateaus at around 14,000 feet. Many areas are accessible only by trail. Some have dirt roads that wind their way up through the narrow canyons. During rainy season (January through April) many parts are accessible only on foot. Most Quechua are subsistence farmers, scratching out an existence on the eroding hillsides, where the soil must have fertilizer to produce anything.

When the Spanish came in the 1500's, they found Quechua and Aymara people throughout the mountains. Education began through the Spanish Catholic church, and the Spanish language and culture began to overshadow the native languages and cultures. The prestige of Spanish continues to degrade Quechua and Aymara. There are

many places in Perú where people coming to town bring their 'city' clothes with them and change just outside the city, not wanting to be seen as 'indio' (Indian). Many mountain dwellers understand Quechua but refuse to speak it. When asked a question in Quechua, they answer in Spanish, often a very broken Spanish. In a few remote areas native languages have died out, but still the majority of monolingual Quechua speakers live high up in isolated hamlets and farms. The majority of adult monolinguals are women. In the remote areas, the men who speak Spanish tend to be the town leaders or authorities, taking care of paper work or negotiating for the town with the regional authorities. In the valleys, most bilinguals are losing their Quechua through disuse and the desire to disassociate themselves from their culture and language.

Education among the populace of the mountains is well established, especially in the less remote areas. There are public schools throughout the valleys and up into the higher altitudes, even in almost inaccessible areas. Many school teachers, living in towns, walk up for a few hours to reach their classrooms, which are located in distant villages. Until recently, however, schooling in the mountains has been in Spanish only. Some of the teachers are themselves Quechua speakers and some will use Quechua in the outlying schools to help the children who are monolinguals. But, schooling is still primarily in Spanish. Those who learn to read, learn to read in Spanish. Hence, there are Quechua speakers who read only in their second language, Spanish. Unfortunately, the majority of these people are not readers in the true sense. For reasons such as lack of Spanish vocabulary or a negative school experience, many just 'word call' or 'syllable call' and do not read with understanding.

Most mountain children go to school through the primary grades. However, since schooling is in Spanish, monolingual Quechua might repeat first grade three or four times because of the language barrier. There are secondary schools, but these are usually near the main roads in cities and towns. Students from more remote areas must walk long distances every day or perhaps find a place to live during the week so that they may attend high school. Normal schools and universities are possibilities for further education, but not many Quechua go on for further schooling.

II. The Ancash Situation

The setting is the 'Callejón de Huaylas' (Huaylas valley) in the Department of Ancash, in the central highlands of the Andes. There

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are approximately 200,000 speakers of this Quechua dialect, ranging from monolinguals to bilinguals (incipient and coordinate). The people live at altitudes varying from 6,000 to around 14,000 feet above sea level. Agriculture, education, and bilingualism in Ancash are typical of the Andes.

The value of Quechua as a language and culture, however, is fairly high in Ancash in comparison with other areas of the mountains. Even in larger towns and cities, Quechua is the language of the market; most merchants speak Quechua in order to sell to their customers. Many of the Ancash Quechua women are not ashamed to wear their multicolored skirts nor to carry their produce in their shawls to the market. Regional hats are worn as protection from the intense sun or the pounding rain, as well as to show where they are from. There are, however, those who would rather leave the old ways and become like the Spanish speakers.

III. The Factors

The question of accessibility of outlying rural areas is a major factor in the SIL literacy program in Ancash. Subversive activity and the vicissitudes of weather combine to close down roads to many small Quechua communities. The extensive dialect area and geographic inaccessibility of many towns has complicated the issue of reaching the more isolated, monolingual Quechua.

Another complication in the literacy program and effort has been the local rejection, due to sociolinguistic issues, of the pan-Quechua orthography, presently endorsed officially by the Ministry of Education. In the central highlands, members of the regional 'Academia Quechua' (Quechua Academy) have discussed the issues and developed a regional orthography which is acceptable at the local level, but has met with some resistance at the national level.

SIL is committed to foster an ongoing program: to encourage the propagation of reading and writing even when we have moved on. A program that will continue without our help, with Quechuas in charge is what is needed.

IV. The Needs

An SIL language program has been going on in the Huaylas valley of Ancash since the early 1960's. Many portions of the New Testament have been translated and are in final draft form. Due to

political changes and other factors, work on these portions was put on hold. Also within this language program, an SIL literacy component had begun in the Huaylas area, but due to sociolinguistic problems, it did not really get off the ground. The interruption of the publication of Scripture portions and other literature has had a stalling effect on the literacy effort.

In 1988, the influx of new language program personnel made it possible for the program to be resumed. Efforts were begun to revise the existing translations and ready them for publication. Because rough drafts existed of major portions of the New Testament, mother-tongue translation checkers were needed. These checkers had to be able to read and write Quechua.

With the possibility for almost instantaneous publication of half of the New Testament, it became imperative that a new literacy program go into full swing, to prepare readers for the newly published Scriptures. However, a literacy program does not consist of only a primer or two. Reading material must be available to keep newly literate readers reading. Literature of varying degrees of difficulty and of different interests was needed. Who should write the literature? Native Quechua speakers would be able to write culturally acceptable and relevant materials better than anyone who has learned it as a second language. Therefore, writing had to be taught as well as reading.

The problem was at least three-fold; readers/writers for checking, readers for Scriptures and literature for readers. Being the only literacy specialist assigned to the Huaylas team at the time, I saw the needs as immense and immediate, and the factors almost insurmountable: set up a program that will be ongoing, extensive geographically, and do it now!

V. A Solution--Theory

In response to the bilingual and semiliterate audiences that SIL is encountering in various areas of the world, there has been a movement to begin with transition literacy--teaching people who are literate in a second language (L2) to read their mother tongue (L1). After a transition program has begun, literacy for the nonliterates would then be started. Sometimes a simultaneous program is begun with nonliterates and literates. (1,2,3) The transition strategy applies particularly well to the mountain Quechua situation of Perú.

A transition program (L2 to L1) is the fastest way to train readers and writers. If a person is literate in one languauge, reading skills may be transferred easily to another language, especially if the orthographic conventions are similar. In her article, 'Beginning with semiliterates' Ann Roke Cates writes about the advantages of a transition literacy program:

> They have a head start -- they know what reading is about. There are quicker returns for student, teacher and village ... It is quicker to supply literature for semiliterates and there is a closer prospect of them turning out literature.[4]

The L2 literates do not need to relearn what it means to read; they must just learn how to read the new and different letters in their mother tongue, and any differences in the writing system, such as punctuation[5]. There is no problem with the semantics or syntax, as the people are native speakers.

VI. A Solution--Practice

Keeping in mind the needs and the factors mentioned above, reading and writing workshops were planned to aim at Quechua speakers literate or semiliterate in Spanish. SIL linguist, John Tuggy, planned and directed the first transition literacy workshop at the SIL Center in Huaraz, a major city in the Callejón de Huaylas. Subsequent workshops took place in other areas of the valley, at the request of various private and government entities.

Three types of workshops were held: 1) beginning reading and writing courses (L2 to L1 transition) for adults and for children; 2) an advanced course to teach text editing; 3) a literacy instructor training course. Initially, the week-long transition literacy workshops used no written instructional materials. Students read from the chalkboard and mimeographed sheets and wrote on the chalkboard and in notebooks. These early workshops were taught by trained linguists who spoke Quechua. Later courses used a rough draft transition primer. This same rough draft was used in the teacher training course along with a teacher's guide, also in rough draft. Lectures were given on Quechua grammar, orthography, and the value of Quechua as a language and culture. Discussions frequently followed lectures, especially those on the value of Quechua. The participants talked about the negative responses they have received from Spanish speakers and how they felt.

In the advanced reading and writing course, participants from prior beginning reading and writing courses heard lectures on creative writing and text editing. Practice in reading stories and Scripture figured highly in these workshops. The workshops lasted two days and students edited their own stories, ones they had written during the previous course.

Sixteen adults who already knew how to read and write in Quechua desired to learn how to teach reading in Quechua to others. A teacher training course was set up. Each student brought one student to the class. The sixteen teachers, trading off teaching responsibilities lesson by lesson, practiced teaching reading, writing and grammar, under the direction of SIL linguist/literacy specialists. These student teachers also helped in the second revision of the transition primer.

One area in which the transition literacy workshop staff experimented was the method of introducing the letters of the Quechua alphabet. Ernest Lee's article on transition literacy[6] presented three methods of introducing the sound-letter correspondence in L2 to L1 transition: from known to unknown letters, from unknown letters to known ones, and introducing letters according to their frequency of usage in the target language. We tried the first and third of these methods. In using the 'known to the unknown' method, letters that are similar in both languages are reviewed. Readers feel successful when they can read words in their mother tongue without difficulty. However, Quechua and Spanish share some letters whose sound values differ and appear farther down the list than their frequency indicated they should, making story writing very difficult and stilted. Connected reading versus instant success, that was the dilemma I faced. Having tried both methods, I chose the 'known to unknown' letter introduction order for the rough draft of the transition primer. However the materials are still in the revision process.

The end result of each workshop was the production of materials. In the children's transition workshop, daily homework was assigned: after each letter was introduced, the children drew a picture and wrote the keyword for their individual ABC booklet. A compilation of the pictures done by the class produced a 'group' ABC book. In each adult class, students authored stories and illustrated them. These stories were later edited for future publication.

The tangible outcome of these workshops has been the training of four translation checkers, the beginning of a collection of stories to be published, the revising of a transition primer, and training of literacy instructors. Attitudinal changes toward Quechua as to language and culture will not come quickly, but it is beginning. The realization that Quechuas can be read and written has begun to give Quechua a standing among the languages of the world in the minds of Quechua speakers.

VII. Conclusion

During the past year, the transition literacy workshops described above began to meet the needs of the language program, including the needs of the Quechua community as expressed by the Department of Education, the regional Quechua Academy, and the church, as well as SIL's needs. The local Education Office has initiated a push for bilingual education in the primary grades over the last few years. I see this as a growing issue in the mountains. It is possible that transition literacy would help older brothers and sisters now unable to get into a bilingual program. Discussions between SIL and the local Department of Education have already taken place in this regard.

The regional Quechua Academy is very much interested in Quechua literacy. Two of its members are extremely capable and could teach Quechua grammar and orthography. SIL language program personnel are being encouraged by the Catholic Church to publish the Scriptures quickly, and the church is also interested in Quechua literacy. The environment is right for an ongoing program. There are those who can take over the direction, and with or without our help keep it going. There is still much to be done: more literature, better primers for transition and for nonliterates, more workshops for adult literacy, story writing and editing, teacher training, etc. While the iron is hot, hopefully, we will have the time and the opportunity to strike.

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LEARNING HOW TO CONVINCE THE EXPERTS

Dorothy M. Thomas

This article was submitted to SIL as a contribution toward International Literacy Year.

After working in the Philippines, Dorothy served with the Chrau people of Vietnam. Since 1977 Dorothy and her husband have been in Thailand. They completed the translation of the Chrau New Testament and are now working with the Northern Khmer language group; Dorothy has also taught literacy methods at Mahidol University.

History

Strung out in three Thai provinces along the Thai-Cambodian border are eight civilian refugee camps which, for the past ten years have been 'home' to 300,000 Khmer refugees, mostly women and children who are awaiting repatriation after having fled from the conflict in Cambodia. In the camps, four hundred Kmer teachers and a support staff of forty teach literacy, numeracy and relevant topics such as childcare and nutrition to a fluctuating population of preliterate and semiliterate adults. Their job is far from easy. Among the women in the camps, the literacy rate is 30%. Among the estimated 8,000 adult education students the course dropout rate is roughly fifty percent, and only fifty percent of those who do finish a course continue on to the next level. Scarcity of teaching materials adds to the difficulties. What few materials are available lack relevancy in addressing the people's immediate needs in the camps and their future needs in returning to Cambodia. Having to develop a curriculum that is suitable to the three political factions represented in the various camps complicates the situation. In addition, some of the 'traditional' methods used are deficient in meeting the current needs of the adult students.

It is in this setting that Anne Thomas, Adult Literacy Coordinator for the United Nations Border Relief Operation in Thailand, worked as an advisor/coordinator with the literacy supervisors, teacher trainers, and teachers from the various camps. In an effort to resolve some of the problems with the lessons and teaching methods, Anne was trying to convince the supervisors that literacy classes could be interesting or even 'different' from the traditional approach, i.e. teaching the whole (very long) Khmer alphabet first. She gained a foothold when the supervisors gave her a portion of time to present

her ideas during a six-week training course organized by the supervisors themselves. This particular training course was to involve, for the first time ever, literacy teachers, teacher trainers and supervisors from *all* of the camps. As a part of her presentation, Anne obtained permission for me to come and do a workshop for thirty teacher trainers and supervisors in December, 1988.

Anne had already worked with some of the Khmer leaders in the Khao I Dang camp near Aranyaprathet to construct a primer from the Gudschinsky-type Khmer lessons prepared for Kvoeu Hor and Barbara Friberg before Cambodia fell. She wanted me to show them how to use the primer and to demonstrate a less formal lesson as well. We began the series of training sessions in the Khao I Dang camp.

Using sentence and word cards they had prepared from one of the primer stories, I started with a Language Experience Approach (LEA) type lesson (even though the story was really from a book). The Khmer pretended to be illiterate students while I taught the lesson. As there was no real 'pocket chart' (Embrey, 1979) prepared, we worked from the sentence cards arranged in place by hanging them over strings tacked to the wall.

During the first day we were able to go through a week's lessons from the cards. That evening they prepared a full experience chart for the story so they could match sentence cards with the story chart at the next camp.

On the second day, the Khao I Dang literacy trainers plus all the literacy supervisors and trainers from all the border camps gathered at Site 2, about eighty kilometers from Aranyaprathet for morning and afternoon work sessions. First, I gave a short lecture on the most important factors in learning to read, and went over the two basic types of learning: real-life and systematic lessons. Then one of the Khao I Dang workers taught a lesson using the new experience chart. As he went through the week's lessons using the LEA method, I explained and emphasized the purpose for each part. This was followed by a discussion about the kinds of things that adults need to know how to read in daily life, i.e. signs, prescriptions, etc.

Finally, we elicited a story based on one Khmer supervisor's experience in coming to the Site 2 camp (very meaningful because normally they are not allowed out of their camps). Then the Site 2

workers were given instructions to make an experience chart and cards to teach that story the next day.

When we arrived the next day, the Site 2 camp was ready to teach the new story from their experience chart. It turned out that the line length in one sentence card was not identical to the one in the story chart. So the 'students', who were matching the sentence cards with the sentences in the story chart, made a big show about not being able to match them. This showed that they were really catching on as to how the method worked. (Previously some of them had been pretending to 'sound out' the words in the sentence, and this response reemphasized the point that beginning students really would not be able to see the letters as such yet.) They clearly saw that the beginnings and ends of the cards, the unusual things above and below the lines, etc. would be noticeable to illiterates. After that I went through the teaching of a Gudschinsky primer lesson.

Later that day, Dr. Suwilai Premsrirat from Mahidol University in Bangkok, talked about Thai Nonformal Education (NFE) methods used to reach the semiliterates. She reemphasized that we need both systematic lessons and student-initiated lessons to catch everything. Then I talked about some of the experiences Anne has been trying to get the teachers to capitalize on, like medical prescriptions, signs in camp, etc., giving them pointers on what to do or not to do. After that I summarized what the two methods I had shown them accomplished, and they asked Dr. Suwilai to summarize her ideas to close out the training session.

Despite all this training, in the following week the Khmer told Anne they were afraid to follow the experience chart methods, so she showed them again how to make a lesson, using the pill bags they get from the medics in camp. Apparently that seemed to help a little, but they still weren't convinced,

Two months later in mid-March those same Khmer literacy supervisors were invited to a writers' workshop for the Northern Khmer who live in Surin Province, Thailand, just north of Cambodia. The Northern dialect is close enough to the Standard Khmer so that with practice they can understand each other fairly well. For the Northern Khmer, all schooling has been in Thai, so they were preparing materials in Northern Khmer using the Thai script, as opposed to the Khmer script. The Khmer prepared similar materials: pamphlets, booklets, posters, etc., but used their own script (a few posters were identical for both languages, except for the writing on

them) on topics in health, culture, and elementary education. In addition, just for the Khmer there were a few sessions discussing the differences between structured and nonstructured learning, and a brush-up on how to teach a Gudschinsky-type lesson. The Khmer literacy workers also made several trips to Nonformal Education (NFE) projects in the area. At the first site, they actually saw the methods being used in a real situation where the teacher was teaching a lesson from a song.

Immediately after returning from the Surin workshop, the Khmer literacy workers had guest trainers from the French ESF group (Ecoles Sans Frontiers) present a three-day training session on the use of experience charts and learning games. As the ESF people have been working in Lao refugee camps, they have faced some of the same problems as the Khmer, i.e. teachers' low educational background, limited supplies, and difficulties inherent in a refugee camp situation.

Conclusions

After the literacy seminar, writers' workshop, field trips, and ESF training, Anne found that the literacy workers were enthusiastically preparing lessons to go with pill bags. She asked them why they were suddenly doing what she had urged them to do all along, and they replied that they hadn't believed her before! What made them finally believe her?

1. *Her ideas were validated by Asians.* Western techniques are often thought of as workable only in the West. They said what convinced them was that they actually saw Asians doing nonstructured type lessons in Thai villages.

2. *Confirmation of new ideas from someone older, and from university teachers.* In Asia, age and position are extremely important for passing on new ideas. Since I am much older than Anne, the Khmer called me 'Mother'. After the training sessions were over, whenever Anne mentioned something, they responded, 'That's just what Mother said!' Because Mahidol University had sponsored the writers' workshop, and because the ESF workers were from France (the source of *'real* academic learning' for Khmer) an official stamp of approval was quickly recognized.

3. *Evidence that a new idea does work.* The supervisors are hungry for ideas from the outside, and they want to know if a new idea works in other places, especially in contexts similar to their own. They

specifically asked me if the LEA method was used elsewhere and I assured them that it is used not only in America and Australia, etc., but even in a project by a Thai teachers' college for the Northern Khmer in Surin. When they actually saw the NFE instructors in the Thai village teaching reading with a song, they were visibly impressed. Coupled with seeing the NFE project working, they heard from the ESF workers about using the method in similar situations in other camps.

4. *Hands-on experience.* Working together with their 'country cousins' in Thailand at the writers' workshop on the grounds of the local NFE office convinced them that they themselves and their classroom teachers could successfully teach nonformally.

It was the compounding of all these experiences in a few short months that actually convinced the literacy experts that other methods could be used. No one experience would have been sufficient to change their outlook.

The Future

The idea of experience based learning was well underscored and accepted. Anne is hoping to wean the camp classroom teachers away from complete dependence on the alphabet approach, especially by getting them to have a special day a week for writing letters or doing something meaningful with reading and writing other than book lessons or lectures.

Meanwhile, they revised and printed the Khmer lessons prepared by Kvoeu Hor, giving the teachers something structured to teach from. To go with the structured lessons, a *very simple* teachers' guide is being prepared to replace the former guide which included too much detail, making it very cumbersome. The sample was in the rough draft and difficult to follow. The Khmer prefer to be given just a few guidelines and the desired result.

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ABSTRACT

Miller, Kathryn Elizabeth. 1990. **The fit between training and use in a vernacular literacy training program: an ethnographic study of four Papua New Guineans**. Ph.D. dissertation, University of Pennsylvania. 288 pages. *(Available from UMI, order # 91-01193)*

Kathryn Miller did minimal work in Tzeltal literacy while on the Village Living Staff at Jungle Camp in Chiapas, Mexico. She did research on Functional Literacy among American adults with two literacy councils in Allentown and Easton, P.A., and also research for a dissertation on vernacular literacy training courses, working with National Literacy Courses in Papua New Guinea.

This dissertation is an ethnographically-based examination of the relationship between vernacular (mother tongue) literacy training given at a National Literacy Course (NLC) in Papua New Guinea in 1987, and the usefulness of that training, when four Papua New Guinean course participants return to their local community.

To determine the effectiveness of the training, the following three issues are considered: 1) What was the level of literacy awareness in the community prior to the four participants' attendance in the course? 2) The National Literacy Course curriculum, 3) How did the course participants apply the NLC training when they returned home? These issues are discussed against the background of Brian Street's (1984) theoretical models, the autonomous and ideological, for analyzing the uses and consequences of literacy.

Results indicate a lack of application of the vernacular literacy training received by the four literacy participants in the 1987 NLC to their local community literacy needs when they returned home. Analysis shows that the training received was not appropriate for, or applicable to, the level of vernacular literacy need in the community.

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THE USE (AND ABUSE) OF AN ALPHABET BOOK WITH ADULTS

Joan Bomberger

Joan Bomberger received her B.S. in Education from Shippensburg State College in 1974, and her Masters of Theological Studies from Regent College, Vancouver, B.C. in 1982. She has been a member of the Sudan Branch of SIL since 1987. At present she is the advisor for the Luwo literacy project being carried on in Khartoum.

When the literacy teams in southern Sudan began in 1977[1] to make reading materials for use in rural schools in cooperation with the Ministry of Education for the then Southern Region, they began with a booklet of prereading activities. These activities included recognizing same and different shapes, differentiating the sounds of the language, and developing small-muscle coordination by making the basic strokes used to form letters.[2] Following this was a Gudschinsky-style primer series which taught all the phonemes of the language one by one.

As the preprimer and primer series were tested in schools in four fairly unrelated languages, a consistent complaint from teachers was, "How can we expect to teach the children to read if we don't teach them the alphabet first?" Most teachers had no idea what they were supposed to be teaching in the preprimer, consequently they taught it poorly. And since the full primer series could take up to two school years to complete, both teachers and students alike lost track of the goal which they were working toward--to learn the complete set of symbols used to write their language. They wanted to know the whole before setting about the task of concentrating on each bit of that whole.

So the decision was made to try to accommodate the desire of the teachers. An 'alphabet book' was created to teach the alphabet, yet do it within meaningful contexts, and give some opportunity to learn symbol and sound discrimination as well. For each letter of the alphabet, there is a page with three pictures of items, or sometimes actions, which have that letter in them. The word for each picture is written under it. The letter in focus is not always the first letter in the word, in order to allow for practice in discriminating it from among the other letters in the word. The people usually want the presentation of the letters to be in alphabetical order.[3] Sample pages and teaching instructions for using the alphabet book are included at the end of the article.

When I began a literacy program with Luwo people who have come to Khartoum to escape the civil war in the South, I had no idea how important the alphabet book would prove to be. I started the literacy program with a transition primer for educated people who have a knowledge of English. I slated the alphabet book to go with a beginning primer for new readers, but even at that, I thought it would be 'cosmetic', and was not sure of its significance.

In the transition primer the left-hand page of each lesson presents letters with a key picture and several words representing each. I thought the layout and presentation were very clear and straightforward. Each lesson introduced four or five letters. However, people would look right at the page, and tell me that they wanted me to bring them the 'alphabet'. Never mind that it was, to my way of thinking, set out very nicely and clearly before them. One concession I made was to print the whole alphabet in the beginning of the book. But the real hit was when I went ahead and expedited the production the production of the alphabet book for use as an introduction before the transition primer.

The people have been very particular about the choice of words and pictures. Because there are only three items per page, each item receives more focus than in other types of material, i.e. a loan word which may be accepted in story context is not appreciated in isolation. They didn't want any Dinka or Arabic words in the book. I have accommodated them on this point, despite the argument that a word is valid if it is in common usage.[4]

Pictures have received similar careful evaluation, again perhaps because of the few items in focus on each page. Pictures that were accepted in the transition primer were criticized in the first draft of the alphabet book. Care needs to be taken if using pictures drawn by an artist from another language group. Some things, like elephants and trees, are pretty generally acceptable. However, other items, such as types of hoes, tassels, and even stools, are often culture-specific.

Another problem was with pictures related to the displaced situation of the Luwo people with whom I am working. Many people, particularly young adults, do not remember all the wild animals in their homeland forests, and other items from the countryside. We had a difficult time ascertaining the identity of a number of animals named in the Luwo word lists, which meant that I couldn't use them in the end.[5]

Obviously, concrete picturable nouns are best for the alphabet book. Verbs can present a problem, even if the action is readily picturable, as people may expect the word to be naming one of the items rather than the action pictured. In Luwo word care needs to be taken to check whether people will accept saying a particular verb in isolation or not. I recommend careful testing of words and pictures with a good cross-section of the community. I first produced twenty alphabet books by photocopier, and these twenty received twenty-five percent revision. Another batch of fifty were reviewed and revised again by twenty-five percent. After that, a trial edition of three hundred was produced by a local printer.

The most common disuse of the alphabet book is that people use it to try to learn to read words, whereas its purpose is to learn to recognize the letter shapes and sounds. This purpose needs to be stated explicitly and repeatedly. Nonetheless people continue to study by copying the words and feeling that they need to learn to read and write them. This isn't entirely bad, especially for the English readers who can recognize all but three of the letter shapes. (And even these shapes are familiar to some, due to earlier work by the Catholic Fathers.) However, this is not the proposed purpose of the book. One colleague's idea for countering this problem is to just use the pictures with the letter and to not write the words under them.

Transition students are encouraged not to spend too much time on the alphabet book before going on to their primer, especially as the primer reintroduces the letters of the alphabet on the first page of each lesson. Generally, however, I have found the alphabet book to be an excellent public relations and promotional tool. It is especially valuable for introducing an orthography and for having the community 'get used to' the way their language looks in writing.

Notes

1. My information on the early literacy work in Sudan and the origin of the use of an alphabet book came from Wanda Pace, who was involved in the government-related literacy project from the beginning.

2. There was also an 'experience chart' type of story near the end of the preprimer which was used to teach a dozen or so nouns and verbs as sight words to be used in the early primer stories.

3. A few language groups have asked that all vowels be presented first, or that 'non-English' letters be put at the end of the English alphabet.

4. Some people object to the Arabic word 'kitaab' for 'book' on the cover. However, I have told them that they will have to think of a substitute in Luwo before I remove it.

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5. It might be a good project in its own right to have a chart with animals and their Luwo names.

Notes as to the use of the alphabet book and the teaching method are followed by two sample pages of the book.

HOW TO USE THE LUWO ALPHABET BOOK

PURPOSE: The purpose of the alphabet book is to teach the student to recognize the letters of the alphabet and the sound each letter represents.

It is **not** required that the student be able to **read** and **spell** each word in the book, even though some may be able to do this. Reading instruction will begin in the primers (reading instructions book).

TEACHING METHOD

1. Introduce the new letter by name/sound.
   Write it on the blackboard or point it out in the book.

2. Give practice in recognizing the new letter and its sound.
   Write the first word and ask someone to point out the new letter.
   Do the same for the second and third words.
   You can write the letter being taught underneath:

   Ex: ŋuuh nyaaŋ uŋɔɔŋɔ

   ŋ ŋ ŋ ŋ

   Tell them to listen for the sound of the new letter as you read the three words.

Ask them to name other words with the same sound.

3. Revise other known letters by asking students to point them out as you name them.

4. Teach them how to write the new letter.

Summary: Ask the class to tell you the name of the new letter, point it out, write it, and give words containing it. As time permits revise previously learned letters.

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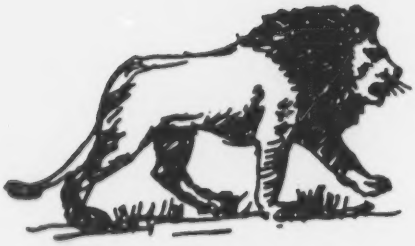

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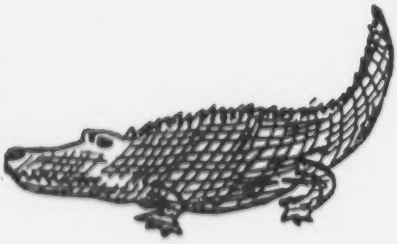

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THE WESTERN BUKIDNON MANOBO PROJECT

Lynne Piña

Lynne de Guzman-Piña, born in Manila, Philippines, finished her Bachelor of Arts in Economics at the University of Santo Tomas, Manila, in 1979. She worked as a research assistant at the University of the Philippines, Manila, and then as literacy facilitator in Bukidnon, Mindanao for eleven years, with the Translators Association of the Philippines (TAP).

I. Introduction
II. Background
III. Methods of Operating our Literacy Program
IV. Literacy Income Generating Projects
  A. Variety Store
  B. Corn Farm
V. The Distribution Program
VI. Evaluation and Recommendations
  A. Literacy Classes
  B. Teachers' Training
  C. Income Generating Projects
  D. The Distribution Program
VII. Conclusion

I Introduction

This paper will describe and evaluate the WBM literacy program from 1981 to 1988 and the distribution program from 1979 to 1984 in the areas of: 1) what worked; 2) why it worked; 3) what didn't work; 4) why it didn't work; and 5) what could have been done differently.

The major problem encountered throughout the study was that when the literacy and the distribution programs were set up, they did not provide structures and mechanisms for evaluation. The projects were implemented with no plan for evaluation afterwards.

II. Background

Western Bukidnon Manobo is the language of some 15,000 Manobo people in the Southwestern portion of the Province of Bukidnon on the Island of Mindanao in the Philippines. It is one of a number of Manobo languages all of which belong to the Philippine

Branch of the Austronesian language family. Until recently these people have been relatively isolated from the mainstream of the country's life and activity. The rate of illiteracy is high but the people are anxious for education.

The literacy program was started by Dick and Betty Elkins of the Summer Institute of Linguistics in the early 60's. George and Valerie Hires joined them in 1969 as literacy specialists. When the Hires left in 1976 and then the Elkins after the completion of the vernacular Scriptures in 1979, we (Translators Association of the Philippines, Inc.) took over the Western Bukidnon Manobo project.

Some time in 1983, the Canadian International Development Agency offered financial help and thus we were able to expand our literacy program. We were able to make a preprimer and also revised the primer made by the Elkins. Supervisors and teachers were given food allowance, salary and fare for those who needed to travel. Further, in 1986, CIDA gave us capital to start our income-generating projects.

III. Methods of Operating our Literacy Program

Before a literacy program was formally started, we contacted the leader (datu or barrio captain or barangay official) of the Manobo community and explained to him our program for teaching adults to read and write.

The teacher trainee was chosen from each village by the people or the leader, after the desired characteristics of a literacy teacher were explained. Often the one chosen was someone with at least two years of high school.

We had two-week training periods for our teachers. During this time they received no pay, but were provided with food. During the training period we endeavored to upgrade the teachers' own reading and writing in their vernacular. We trained them in the use of the preprimer and the first ten lessons of the primer, and arranged practise teaching for them every day. To begin with, they practised teaching fellow trainees and then afterwards they practised with a small class of illiterate people. We observed the teachers and gave help and advice after the lesson. At the end of the training, an evaluation was done on all trainees. Those who passed the standard received a certificate and teaching materials and were assigned to a village where they could start to teach.

The literacy students decided the class meeting times, usually three times a week. Classes were usually held at the barrio hall, or a school or church. They provided the teacher with a place to live, and helped provide his food. The latter provision was not without problems; it was only in areas where the teacher had relatives that he was fed.

We usually held a literacy closing program where certificates were given to students who passed the exams. We always invited representatives from the Department of Education, Culture and Sports.

At the start of the program, we were responsible for supervising the classes. Later on, we chose the best male teacher who had a slightly higher educational attainment to become the supervisor. We trained him by taking him around with us for two weeks, and wrote the reports with him. Then we took turns visiting. Presently, he is doing the job by himself.

It was not until five years after the start of the literacy program that we found out that about 65% of our literacy graduates forgot the skills of reading and writing which they had learned. This was because they had never applied/used their acquired skills. In March 1987, we made an advanced class curriculum to develop their needed fluency. This was a twenty-five lesson course which included the study of the health book and atlas. It was designed to be taught to literacy graduates once a week for two hours. Folktales and Scripture were also part of the curriculum.

IV. Literacy Income-Generating Projects

From the time the Manobo literacy program was launched, it was made clear to all lay teachers and supervisors that the Canadian International Development Agency would finance our program for at most four years. We told them to plan to set up income generating projects which would be able to support the work in the future.

It was not until May twenty-three, 1986, that the lay teachers and the supervisor had a meeting to discuss the possibility of setting up a project. Each of them was given a chance to voice his opinion. After several hours of discussion, they voted for the project they would like to have, which was poultry. However, this poultry project did not materialize because it was too complicated to manage. Marketing of the products was another problem we had to consider.

A. Variety store

The second choice was a corn farm. But, since it was already too late in the season to start this project, the third choice, which was a variety store, was opened on June thirty, 1986. The initial capital of more than P6,000.00 (including the building, stock and other operational expenses) was given by CIDA.

Prior to the operation of the store, we pointed out to the teachers and supervisors, as well as the general population, that the income generating project was open to everyone. We let them feel that the project was 'theirs' by letting them participate in the decision making, informing them about its conditions, problems, etc. Also, we made it clear to them that its proceeds would be used to educate the illiterates through the literacy program, and that because of this goal, credits could not be allowed.

For more than three months my husband, Noel, and I had to take turns operating the store because we could not find anyone to do the job. Then one of the best literacy teachers took the job. She handled it well even though she received only P100.00 a month. She worked for just two months, however, and then returned to teaching literacy classes. While we waited for another storekeeper, the literacy supervisor volunteered for the job for two months. Then, we hired one of the young people in the church. Although she was very diligent in her work, we terminated her after five months because she failed to follow some of the store regulations (such as not getting stock worth more than P50.00 per month, nor allow credits, etc.).

The third storekeeper was the wife of the lay pastor. She worked for nine months before resigning to take care of her baby. From February 1988 until the store was closed in April, Noel and I took turns running it.

It was decided that the store be closed because it was complicated to manage, and it was hard to find a permanent storekeeper.

From the time the variety store opened on June thirty, 1986, until the time it was closed on April thirty, 1988, the total net income was P11,698.55. This income plus the money from the sold stock was used for the literacy program and for financing the corn farm project.

B. Corn farm

The corn farm was started in May 1986 with an initial capital of P10,000.00 provided by CIDA. The seven hectares of land cultivated for this was owned by some Manobos in Pangi. The agreement was for the landowners to get one third share of the net income while the literacy project would get two thirds.

Prior to the operation of the corn farm project, Noel did a feasibility study. During its first year, he was full time in the project. The following year, he trained one of the literacy supervisors to do the job, and the supervisor has continued the job from that time up to the present. Noel acts as adviser, visiting the farm from time to time.

Presently the area of land cultivated has been reduced from seven hectares to three hectares because some of the landowners wanted their land back. Also, some of our working capital has already been used for continuing our literacy activities.

Our income in both generating projects is deposited in the bank with our literacy supervisor, TAP South Field coordinator, and Noel and me as signatories.

We had planned to organize a Manobo literacy cooperative, but because the teachers had been reduced to three, we decided not to go on with it.

V. The Distribution Program

The colporteur program/distribution program was initiated by Dick and Betty Elkins in February 1979, after the completion of the New Testament. Its main goal was to distribute the New Testament and other books among the Manobo people through the ten hired colporteurs. The colporteurs were all believers, and four of them were in charge of handling churches. Besides selling books, they led Bible studies in areas they visited. They set their own schedules as to when and where they went each week.

Initially, the distribution program was funded by some of the Elkins' friends abroad. When this fund ran out in 1981, only five colporteurs were asked to continue the work. These colporteurs formed a committee and elected Wenefredo Libo, a pastor, as their chairman.

Colporteurs' Income-Generating Projects

Some time in 1981, the five colporteurs met to discuss the possibility of having an income-generating project. Convinced by Wenef's presentation, they decided to have duck raising as their project. Without further feasibility study, this project was launched in the same year with an initial amount of P2,000.00 borrowed from Hart Wiens (SIL Technical Coordinator at that time) to buy ducks. The colporteurs' counterpart was to buy the feed. After several months, they turned the project over to the Barandias church, as they felt it was too expensive for them to carry out. Then the ducks were found to be too old to lay eggs, and were sold.

A poultry project was started in 1983 with financial help from George Hires. Peter Alip, a Manobo graduate of Agriculture, came to Barandias almost every week to help with this project. The church took turns in feeding the chickens. As far as we know, this project was stopped in September 1984 when the manager had improperly spent all the money. As a result, the colporteurs' distribution program was discontinued later that year. Several months later some of the lay teachers and literacy supervisors assumed the responsibility for distributing the Scripture and other literacy materials while they held their classes or did their supervision work.

VI. Evaluation and Recommendations

A. Literacy classes

Our 1981-1988 records indicated that of the 802 students enrolled in our literacy classes, 67.5% received certificates of achievement, 14% received the certificate of attendance and 18.4% dropped out of the course.

Even though a high percentage (67.5%) graduated, 65% of these graduates did not actually use their newly acquired literacy skills. If the advanced classes had opened earlier, the new literates would have been able to develop their needed fluency. Therefore, my first recommendation for any literacy program is that advanced/fluency classes be organized immediately to follow the first level of literacy in order to give each new literate a chance to practise reading and writing.

One teacher suggested that home Bible studies could be one way new graduates could practice their skills. However, this should be done entirely outside of the literacy program. In our experience the

advanced classes met with criticism because Scripture reading was included in the curriculum. While in some areas of the Philippines, the inclusion of religious material in literacy classes was both acceptable and welcome, this was not the case among the Western Bukidnon Manobo.

B. Teacher training

From 1981-1988, forty teachers were trained at different times. Some of them did not teach because they didn't pass the standard. Others were forced to terminate because of bad records, and the rest resigned.

As of this writing only three teachers are doing their work. Having few teachers at present was timely since our corn farm project can no longer afford to support more teachers and supervisors.

It seems that we had spent much time, money and effort in training lots of teachers and then finding afterwards that some if not most of them were not able to pass the standards. I, therefore, would like to suggest that prior to training teachers, each trainee should be personally interviewed and tested by the field workers assigned in the area to see if he has an aptitude for teaching. This procedure would help lessen the teacher's training expense. Furthermore, the number of participants for each training session should be not more than ten people so that each of them could be given time for practise teaching, and also it would be less hectic and tiring for both trainers and trainees.

We made a big mistake in having twenty-five trainees during our first Literacy Instructors' Institute (LII). Since the training was done haphazardly due to limited time, only ten of them were able to grasp the content of our training and were able to handle a class.

Our literacy program would have worked better had we controlled the number of our teachers initially. What happened was that we started with a big number of teachers with only two of us to supervise. It was decreased later when it was too much for us to handle. What we should have done was to start with probably five or six teachers and then increase them depending upon the demand and the availability of supervisors and funds.

Asking the people or the leader to choose their teacher-trainee worked well in the Manobo setting. It gave them a chance to participate in the decision-making, thereby making them feel that the

program was 'theirs'. Having some Christians as teachers made them feel that the literacy program was intended for both the Christians and the non-Christian illiterates. It changed their way of thinking that classes had a religious objective. By utilizing the existing social structures or resources, we were able to get the maximum participation.

Assigning teachers to their own village, however, seemed not to be workable in the Manobo society. It was observed that students were motivated to come to class if their teacher came from another village. Further, they didn't feel easily embarrassed/discouraged even if it took them a long time to learn. This minimized our dropout problem, which was thirty percent in 1975-1979 (George Hires), to eighteen percent in 1981-1988.

C. Income-generating projects

CIDA financed the Western Bukidnon Manobo literacy program for four years. A year prior to the end of this grant, our lay teachers and supervisors were able to set up two income generating projects, namely the variety store and the corn farm. Both projects were able to expand financially with the help of the local community and were able to support our literacy program.

Our two income generating projects had only one year to expand financially. The following year, with the end of the CIDA grant, they had to support the literacy activities even though they were not yet ready. As a result, some of the working capital had to be used, thereby decreasing the area for our corn farm. Lack of adequate money to finance the literacy activities in the WBM makes progress/continuity of the program impossible.

Seeing this kind of situation, I, therefore, suggest that prior to the implementation of any literacy program, we should plan to set up an income generating project which could finance it. Finding funds for the literacy program would not become a major problem if income generating projects had already been started for it. If there is any 'outside fund', I suggest that it should be used to expand any income generating projects rather than being used directly to pay literacy teachers and then cut off afterwards. I felt that we could have ensured some kind of ongoingness in our literacy program if it had been locally funded from the start.

D. The distribution program

The distribution program had a significant effect in the spiritual life of some of the Western Bukidnon Manobo people. The colporteurs took seriously their responsibility for evangelism through the literature distribution program and for nurturing some of the Christians. Through the Bible studies they handled, forty Bible studies/church groups with approximately 500-600 participants were formed. When they had to stop their work in 1984 due to financial problems, the growth of the church slowed down. And in fact, some of the Bible study groups were discontinued. Despite the effort done by some lay teachers and literacy supervisors, the distribution of the vernacular Scriptures and other literacy materials has also decreased.

The whole distribution program was carried out with little involvement from TAP or SIL fieldworkers. A committee composed of five people was established as a decision making committee for the program. One colporteur was requested to handle the finances directly with the SIL director and finance office. An effort was made to include Manobo church leaders in setting up an income generating project primarily for the distribution program.

For any future distribution program in other areas, I would like to give the following suggestions:

1. Efficient planning especially regarding funding should be done when translation work is still half done. Local churches (or other infrastructures/sponsors) must plan ahead in setting up an income-generating project so that by the time the distribution program is started, they already have funds they could utilize in carrying it out. I encourage us that from the very start, we should try to utilize local funds as much as possible. If ever there are some 'outside funds', they should be used in setting up an income-generating project.

2. A feasibility study should be done prior to implementing any income-generating project.

3. We should be careful in choosing local people to carry out responsibilities in our program. At times, there is a disadvantage in including an influential person on the decision-making committee

because of his tendency to make all the decisions without considering the opinions of others.

4. One literacy supervisor I interviewed suggested that colporteurs should be given a quota of the number of books they should dispose of in a month period.

VII. Conclusion

It is difficult to come to conclusions concerning how to launch a program in a developing society. Societies are very different from one another and their reactions to input vary considerably, depending upon their previous experience with the outside world.

My work with the Western Bukidnon Manobo has taught me many things which may apply generally:

1. Planning and organizing literacy programs is a relatively simple job. Motivating people to want to read and ensuring that they utilize their newly acquired skills are much more difficult to do.

2. Although Scripture-in-use is part of the literacy program I realized that in some societies we need to separate the two from each other in the actual implementation.

3. If we want a program to continue, the local community must participate in the initial planning, organizing and running of the program. Considering this, I recommend that time should be given to a program campaign. Information regarding the program must be disseminated to the people from the very start so that they will see the program as 'theirs'. If we expect them to be able to manage their own program, 'how to' training must be a vital part of the project. To ensure their active involvement, there is need for community mobilization.

4. The good approach is not to put much outside money into the running of the program, but to invest outside funds in projects which the community could then use to produce income for its own programs.

5. Income generating projects to be run by local people should be launched prior to the start of the distribution and literacy programs.

ABSTRACT

Morren, Ronald Carl. 1977. **A descriptive study of the procedures involved in developing literacy materials for a preliterate society in the Republic of the Philippines**. Ed.D. dissertation, New Mexico State University. 440 pages. *(Available from UMI, order # 77-20467)*

Ronald Morren is an SIL member currently assigned as assistant to the Americas Area Director and as TX SIL staff.

This study describes the steps taken by the researcher in preparing literacy materials for a preliterate society in Southern Mindanao, Republic of the Philippines. While the main objective was to produce literacy materials through which reading could be taught, it was first necessary to gain sufficient sociological, cultural, anthropological, as well as linguistic and language background concerning the people for whom the literacy material was intended. Therefore, the following disciplines were investigated relative to the cultural community under consideration. (While there is somewhat of an order involved in the numerical listing below, it should be understood that there is much overlapping and one area cannot be exhaustively studied without simultaneously examining other categories of information.)

1. Sociological, cultural, and anthropological studies were necessary for an understanding of the values, mores, and customs of the community.

2. A basic speaking knowledge plus linguistic analysis of the language were important for purposes of preparing written reading lessons for this heretofore unwritten language. This necessitated a more scientific look at (a) the phonology--the study of speech sounds, (b) the morphology--the study of how these speech sounds combine to make meaningful utterances, and (c) syntax--the study of sentence construction.

3. Orthographical considerations were important to answer the question, "How shall I write this language?" Thus, an orthography test was developed by the researcher to obtain native-speaker reaction to alphabetical symbols and spelling choices. Incorporating the results of this test in the rules for writing this language is expected to result in wide acceptance of the written form of Sama Bangingi as advocated by the researcher.

4. The actual literacy materials which were prepared include a pre-primer, primer, and accompanying reading material.

Results of the study are not only a set of learning-to-read materials, but evidence that speakers of Sama Bangingi can learn to read using these materials. Bangingi school teachers were given a seminar on how to use these literacy materials to teach other Bangingis to read. Despite the handicap of political strife and fighting between government troops and dissidents in the area, approximately 80 school-age students and 25 adults were taught to read in the fall of 1975 using the materials as herein described. Teachers using the primer testified that students learn to read more easily with these vernacular materials than with other methods they have used.

Notes for contributors: Readers are invited to submit letters of comment and/or publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 W. Camp Wisdom Rd., Dallas, TX 75236.

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NOTES ON LITERACY

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NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 W. Camp Wisdom Rd.
Dallas, Texas 75236
U.S.A.

Notes for contributors: Readers are invited to submit letters of comment and publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 W. Camp Wisdom Rd., Dallas, TX 75236.

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ISSN 0737-6707

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IS LINGUISTICS STILL NECESSARY? OR IS LITERACY ENOUGH?[1]

Sarah C. Gudschinsky

Dr. Gudschinsky joined SIL in 1948 and served as linguist and literacy specialist among the Mazatec people of Mexico. Later she went to Brazil as consultant in linguistics and literacy, gaining world-wide recognition in these fields. She earned a doctorate in linguistics from the University of Pennsylvania in 1956. For nearly ten years she served as SIL's first International Coordinator for Literacy, and was the instigator and first editor of Notes on Literacy. She died of cancer in 1975.

The past few years have seen an increase in interest in literacy in the Third World countries in which most of our work is done. In many of these countries there has also been a shift in language policy in favor of the use of local languages in education, at least at the beginning stages. At the same time there has appeared to be a decrease in interest in scholarly linguistics and international linguistic reputations. This leads to suggestions that we should get out of the linguistics business and concentrate on literacy. Questions raised as background for this paper include: Is linguistics still necessary? Isn't literacy enough these days?

I am not sure whether the people asking these questions are thinking of discounting the writing and publication of linguistic papers, while continuing to do essential analysis, or whether their thought is that even the analysis is no longer needed. In either case, it is the thesis of this paper that both analysis and publication are more necessary now than ever. I will concentrate on the questions from the point of view of the literacy task of the Summer Institute of Linguistics.

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[1]This paper is a slightly edited version of a presentation by Dr. Gudschinsky at the SIL Corporation Conference of 1975. Much of the content of the paper is still relevant to literacy workers today.

The strongest argument for "literacy only" seems to be that governments are now enthusiastic about literacy, and willing to accept help on literacy projects. The history of language policy in many countries, however, is a history of a swinging pendulum--from attempts to eliminate minority languages at one extreme, to the use of such languages in education and government at the other. There are various combinations and permutations of policy, but the one constant seems to be the near certainty of frequent change. This can be documented in the U.S., Mexico, Nigeria, Ghana, Philippines, Ethiopia, Peru, and elsewhere. It cannot be assumed that any government policy is stable enough to provide a base for a major change in the basic policies of SIL.

Of course, we are concerned with literacy, and especially with literacy in the mother tongue of the pupils. It should continue to be our policy--as it long has been--to encourage and stimulate mother tongue literacy, along with transition into the national language, wherever we are working or have any influence on language policy. We should certainly continue to take advantage of every opportunity to be of help in specific literacy programs, and to develop our own programs wherever it is appropriate. But this in no way implies that we should be doing nothing but literacy.

Increasingly the Third World countries are demanding advanced academic degrees and other credentials from the few outsiders from whom they are willing to take help. SIL has excellent credentials in linguistics and many highly qualified competent people. We are gradually developing a group of experts with additional credentials in literacy-related specialties, such as bilingual education, psycholinguistics, sociolinguistics, and the like. But we are not developing any large body of people with credentials in education per se. This is not an accident. Our unique contribution to world literacy is based solidly on linguistics. It is the linguistic and cultural adequacy of our methods and materials that makes them better than competing systems developed by non-linguists. Our claim to have something special to contribute, and to be able to help in literacy programs, is based solidly on our credentials as linguists. It is essential that we continue to be linguists and to publish scholarly

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linguistic articles. Any decay in our linguistic reputation could be fatal to our reputation as linguistically-based literacy experts.

Another aspect of opinion in the Third World is the focus on training local people how to do things, rather than depending on foreigners to do them. In Nigeria, Australia, and Papua New Guinea especially, it is rapidly becoming evident that our major role must be training native speakers of the ethnic languages as linguists, para-linguists, translators, and literacy specialists. The training of local linguists and the supervision of their analytical work and publication obviously requires a higher level of linguistic competence and scholarship than simply doing an analysis. But it should also be noted that this same high level of linguistic competence is essential for the person who is training literacy workers. The production of adequate literacy or bilingual education textbooks requires deep insight into the structure of the language. (Note the dreadful primerese in U.S. reading textbooks written by native speakers of English who did not have any insight into the linguistic structure of English.) This means that the SIL literacy specialist must have available to him an adequate analysis of the language, or must make such an analysis, or must supervise local personnel in making such an analysis. Furthermore, he must be able to help the people he is training to understand and use the analysis in the production of literacy materials.

Up to this point I have been talking about the necessity of high quality linguistics for successful literacy work. I will outline briefly some of the elements of the needed linguistic analysis.

A reasonably detailed study of the entire phonological hierarchy is needed, with attention to the relationship between the orthography and psycholinguistic units at every level of the hierarchy. In the case of over- and under-differentiation of phonemic contrasts, it is important to know what kind of load the involved phonemes carry in terms of ambiguities introduced in the orthography that do not exist in the spoken language. The higher levels of the phonological hierarchy are of importance in relation to punctuation marks, spacing, and the kind of rhythm and chunking that must be taught to the reader.

In grammatical analysis, there is a need for studies of functors and discourse analysis in addition to more traditional clause structure and

morphology. With our linguistic method for teaching reading, functors have a very special role--they are taught by sight-recognition in contrast to the "sounding out" of contentives. It is important, therefore, to know: (a) a great deal about the occurrence and function of functors in various discourse genres, (b) the meaningful matrix within which a functor can be taught, and the minimal pronounceable matrix within which it can be practiced, (c) the degree to which functors are automatic or contrastive, and (d) the relationship between the functors and the chunking of the text by a good reader.

A good literacy text must have some very short stories or other connected material which, despite its brevity, has good discourse structure. It is exceedingly important, therefore, to know: (a) the structure of various discourse genres, (b) the literary genres that are most like common spoken styles and, therefore, most natural for the beginning reader, and (c) the relationship of discourse structure to the functors (e.g. which functors are important at discourse level and are essential to even a brief discourse).

Studies of lexicon and word usage are also essential. It is not very useful to know how often a given word is used in a particular text--but it is exceedingly important to know what vocabulary is used by which sub-groups of potential pupils. Nor is it sufficient to include the most common (and colorless) vocabulary--excellent literacy materials require the use of the specialized words and colorful vocabulary that make the content alive and interesting. There is also need for a study of the relationship between the lexicon and the orthography. Note, for example, that in English the artificial convention of using different spellings for homonyms makes the reading of English enormously easier *after it is learned* because we have different mental images for *sale*, *sail*, *pear*, *pare*, *pair*, etc. It is very probable that a similar contrastive spelling of homonyms might make other languages easier to read. At least studies along this line should be made.

In addition to the strictly linguistic studies, cultural studies are important both from the point of view of what should be included within the literacy textbooks, and in what cultural contexts literacy can be most effectively introduced to the community.

Since adequate literacy work requires both linguistic analysis and the development of new linguistic theory, and since it is essential that this linguistic material be available to local literacy workers and educators, it is obvious that there must be considerable publication within the Third World countries. Much of this material, of course, may be authored or co-authored by local linguists or para-linguists. In addition, the theoretical developments should reach a wider audience in international publication. Publication is a personal obligation in maintaining our credentials as linguists and literacy specialists.

We have spent many years of hard work developing world-wide recognition as an authentic linguistic organization. During those years we have had repeated periods of questioning and self-doubt. If we stop linguistic production at this point, what happens? It seems to me that we cannot shift to "literacy only".

ABSTRACT

Walker, Roland W. 1987. Towards a model for predicting the acceptance of vernacular literacy by minority-language groups. Ph.D. dissertation, University of California, Los Angeles. 445 pages. (Available from UMI, order # 88-21071).

Roland Walker is an SIL member working on Project '95 materials for the International Sociolinguistics Department, Dallas.

Why some minority-language groups are more receptive to the planned introduction of vernacular (VL) literacy than others is a question that is drawing increased interest. Some communities eagerly accept literacy in the VL, either for transition to the national language (NL) or for biliteracy. Others want only literacy in the NL or language of wider communication, if they desire to read at all.

With a view toward developing a model for explaining and predicting the acceptance of VL literacy, this study seeks to answer the question: "Which sociolinguistic variables best predict the acceptance of VL literacy among minority-language groups?"

Quantitative data was obtained through questionnaires sent to fieldworkers of the Summer Institute of Linguistics in eight countries. Interviews with four of these SIL literacy promoters provided data for the qualitative track of this study. Zero-correlations and multiple regression analysis were used to determine relationships between four criteria of VL literacy acceptance and predictor variables.

Significant relationships were demonstrated between measures of VL literacy acceptance and sociolinguistic, programmatic, and orthographic predictor variables, such as degree of contact with the NL, economic pressure for NL proficiency, community involvement in the VL literacy program, and difficulty of the VL orthography in relation to the NL. The four case studies confirmed the validity of the predictor variables' relationships to VL literacy acceptance and illustrated ways in which the variables interact.

HOLDING YOUR READING THEORIES LIGHTLY

Barry Borneman

Barry Borneman is the Associate Director for Language Affairs of the Australian Aboriginal and Islander Branch. Before joining SIL, he worked as a primary school teacher. Barry and his wife have been literacy specialists in the Kriol language program since 1986.

This article was submitted to SIL as a contribution toward International Literacy Year.

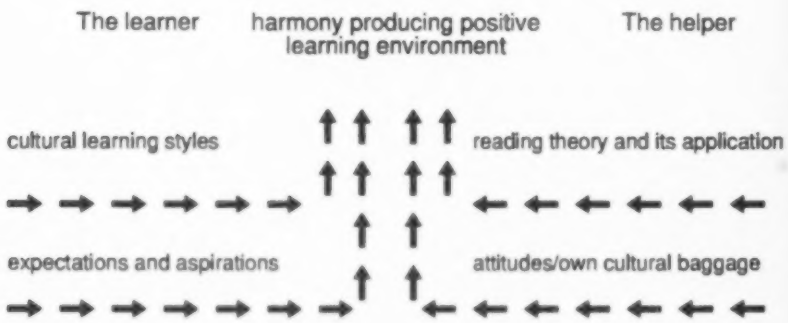
1. INTRODUCTION

The trained literacy worker approaches a literacy assignment with his personal baggage of attitudes and expectations, as well as his favored reading theories and teaching methods. Often, well before the first vital interaction between the learner and the literacy worker occurs, training and practical experience have convinced the worker that certain factors and approaches are essential to a successful literacy program.

I approached my literacy assignment in northern Australia with just such a tightly clasped bag of theories and methods. I soon found I had a choice: to manipulate the reading environment in terms of my own expectations and attitude, or to take seriously the expectations, attitudes, and skills of the Kriol-speaking adult Aborigines I was helping to learn to read. The issue was not to discard my training and experience, but to hold it all lightly, ready to modify or lay it aside to eliminate any potential barriers to successful reading. The goal I needed to achieve was a harmonious reading environment in which the personal and cultural background of both the learner and the helper are taken seriously.

We faced the challenge of harmony as we searched for a method of assisting Aboriginal Kriol speakers in Northern Australia to read Kriol. The potential for personal disharmony and cultural clash is great, particularly when reading is being introduced across cultural

boundaries. I found I had to be flexible. I had to keep my options open so that I wasn't ignoring or clashing against the potentially helpful factors that the learner brought to the task. The Kriol reading program thus became an ongoing experiment in content and method.



2. THE PEOPLE AND THE PROGRAM

Kriol is the most widely spoken contemporary Aboriginal language in Australia. It is spoken across northern Australia, with 20,000 to 30,000 speakers. Kriol derives 90% of its words from English, but its grammar and thinking patterns are clearly Aboriginal in nature. Sociolinguistically, it is a language developed by Aboriginals for communication with Aboriginals. Historically, it developed when various Aboriginal tribal groups were forced together because of government policy or for *protection* from slaughter. The people needed to develop a common language and Kriol was their answer.

In a sense, Kriol is the great hidden language of Aboriginal people across northern Australia. Kriol has had extremely low status, with Kriol speakers themselves often denying speaking it, while the dominant English-speaking community has derogatorily dismissed it as poor English. Until the 1970s, there was little attempt to appreciate the language in the sociolinguistic context. In 1972, SIL linguist John Sandefur started to study Kriol. His writings on Kriol have contributed significantly to raising the prestige and recognition of the language in the academic world.

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Two literacy teams joined the program working in Kriol-speaking regions some 1200 km. apart. My wife and I joined the Kriol program in 1986 to teach adults to read Kriol. The Anglican Church also has a literacy team working closely with SIL. The Education Department officially endorsed a proposal for a Kriol bilingual school program in the Aboriginal community of Barunga in 1975. The program, with a new literacy resource center, continues on today. A few other schools have occasionally made use of Kriol written material, but it has had little impact on the wider community.

In the rest of this paper, I share the steps that I found vital in teaching adults to read Kriol. These steps were necessary in moving toward a learner-sensitive and culturally relevant reading program.

3. STEP ONE: RECOGNIZE ONE'S OWN THEORY OF LEARNING

If I wanted to achieve harmony in the reading environment, I needed to know what factors I brought to it that could clash with those of the learner. In particular, I had to recognize my own aspirations and convictions about learning theories and teaching methods. I had to examine the contents of the theory baggage I carried with me. Were they all essential, as I sometimes assumed? As a first step, I listed what I considered essential to the teaching of reading. A reading lesson must:

1. Include three components of learning (Smith 1981):
    a) demonstration
    b) engagement
    c) sensitivity
2. Operate within a given framework so as to provide security for the learner and helper.
3. Be an adult activity and never portrayed as a children's activity.
4. Be about real communication, about refocusing on held convictions as well as new ideas. It must be a meaningful activity in the context of the learner's community life.
5. Use initial reading material that is *powerful* in meaning.
6. Have a *predictable* text as well as a powerful one (a local author narrative with a high degree of redundancy would be best).

7. Be a discovery/thinking process. Lessons must involve interaction with a powerful written text. Reading is not a passive activity.
8. Use activities to teach specific reading skills that naturally develop from a whole text.
9. Begin and end with a demonstration of fluent reading.
10. Incorporate writing into the lesson.

4. STEP TWO: RECOGNIZE THE LEARNER'S EXPECTATIONS AND MOTIVATION

What was it that Kriol speakers wanted to learn to read? To find this out, I had to listen, wait, and listen some more. The answer became quite clear when Charlie asked to learn to read Kriol.

Charlie was around 50. He had not been to school and had no understanding of reading. It soon became clear that his primary motivation to learn to read was so that he could read the Kriol Bible. The literacy worker with the Anglican Church worked patiently with Charlie from the Kriol Bible. His progress was slow. The Kriol Bible seemed an inappropriate text for a beginning reader. A reading specialist recommended that the literacy worker record a story told by Charlie and have it transcribed. This would be Charlie's basic reading material--personal, immediate, and interesting. After a couple days using this new strategy, Charlie began to lose interest and his reading seemed to regress. The literacy worker was about to concede to the common quip that *you can't teach old dogs new tricks*, interpreted in literacy circles as *don't even try to teach someone over 40 to read*. Then Charlie provided the breakthrough. Charlie arrived and put his Kriol Bible on the desk and, pointing to his own story, said, "I don't want to read that story. I already know it. I told it to you. I want to learn to read the Bible." The literacy worker again took up the Kriol Bible as the basic text for Charlie's reading lessons. From that point on, Charlie's reading ability progressed steadily.

Charlie was not alone in his desire to want to read the Kriol Bible. This story has been repeated several times by older illiterate Kriol speakers. There are several reasons for this. The Kriol Bible is the only significant adult literature in Kriol, is strongly identified as Aboriginal, and was translated by four Aboriginal people from

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Charlie's own community. The Christian churches had historically played a significant part in the protection and history of many Kriol speakers.

The possible use of the Bible as initial reading material clashed at two main points with my theoretical presuppositions. Linguistically, it was unlikely to provide a predictable text. Secondly, the Bible came from a social context outside the immediate Kriol-speaking community. According to Margaret Wendell's categorizing of easy-to-read materials in *Bootstrap Literature*, the translation of a story from outside the culture of the learner is the most inappropriate material to begin with. She states that because of the prime need to match 'the relationship of content to the local culture' (Wendell 1982:24), reading material needs to be by local authors, about local situations and concerns, and in the local linguistic style. I fully support this position.

Other factors, however, were at play at the deeper emotional, personal level. These had to be given priority if learning to read was to occur. Certain components of my well-formulated reading theory, aimed at providing a relevant and interesting beginning text, needed to be laid aside. This needed to be done while still being aware that learning to read can quickly become a laborious task for the uninitiated. The initial enthusiasm dries up in the face of a text that does not make sense, is irrelevant, or has too many unknowns at all levels of language. The challenge then became one of finding a culturally appropriate text from the Kriol Bible that did not make learning to read an impossibility.

5. STEP THREE: ALLOW THE LEARNER'S EXPECTATIONS AND DESIRES TO DETERMINE READING CONTENT

As in other preliterate communities, knowledge has been passed down through a strong oral tradition of storytelling, song, and drama. The place to begin was to identify *oral story forms* in the Bible that had existed as oral tradition both in the Hebrew culture and the cosmopolitan early church. There were the miracles of Jesus and much of his teaching, and stories like Jonah in the Old Testament. But the one story that appeared to lose none of its oral characteristics when put in writing was the creation story in Genesis (1:1-2:4). This

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story not only had a form that lent itself to memory, to recital, and to predictability, but also addressed the same type of questions that Aboriginal mythology endeavors to explain: Why is the world the way it is and how did it happen? In this creation story I was able to harmonize the conflicting factors of what the learner wanted to read and my belief that initial reading material must be predictable, socially relevant, and meaningful.

The components of the creation story are integral to the Aboriginal learner's world. The stars, moon, sun, trees, man, and woman are all part of the immediate environment. These are all understandable and picturable concepts. The learner already has all the information necessary to make sense of this story.

Furthermore, the creation story is characterized by repetition and balance, which are also specific features of oral tradition. This factor assisted the new reader considerably by enhancing the predictability of the text. In fact, approximately 40% of the Kriol text of the creation story is couched in repetitive *oral* refrain. For example, the refrain *Brom deya God bin tok* (and God said), signifying God's creative activity, occurs on average at least once in every four verses. The phrase marking the end of one day and beginning of a new day, *Brom deya naitaim bin gowei na, en wen imbin ailibala, imbin det namba (thri) dei na* (And there was evening, and there was morning--the (third) day), occurs six times in the text.

Since I was forced to look at the Kriol Bible for the initial reading material by the motivation of the learners, I was delighted to discover that translated texts were not as removed in form and content from the world of the reader as first thought. By holding my reading theories lightly, a *harmonious* reading environment was developing.

6. STEP FOUR: IDENTIFY CULTURAL LEARNING STYLES AND THEIR RELATIONSHIP TO THE COMPLEX TASK OF LEARNING TO READ

In just the same way that I needed to state clearly my own underlying assumptions about reading, I also had to ascertain the cultural learning styles implemented by Kriol speakers. By doing this,

I hoped to avoid introducing methods that might hinder the reading process.

Fortunately, Stephen Harris has extensively studied Aboriginal learning styles. I list here some of the learning styles that he observed in his article *Towards a Sociology of Aboriginal Literacy* (Harris 1982):

1. Learning by observation rather than verbal instruction.
2. Learning by imitation rather than verbal instruction.
3. Learning through the learner's own trial and error rather than the teacher's verbal instruction, combined with demonstration.
4. Learning through real-life performance rather than practice in a contrived setting.
5. More person-oriented than information-oriented in learning situations.
6. Problem solving through persistence and repetition.
7. Tending to learn by successive approximations to the efficient end product, or through a series of wholes, rather than through the learning of carefully sequenced parts.
8. Tending to learn context-specific skills rather than context-free principles that can be applied to any novel situation.

Harris recognized that these informal learning styles were developed as technologically efficient for Aboriginal survival needs. While they are not solely appropriate to the teaching of reading, they should be applied where possible.

Learning by observation, imitation, and trial and error (points 1-3) sat well with my reading theory. Harris's recognition that persistence and repetition were strong elements in Aboriginal learning supported my belief that a teacher with a western orientation would probably tire more quickly of rereading than would an Aboriginal learner. This explains why Charlie was content to reread his passage from the Kriol Bible day in and day out without a change of strategy.

Harris's list of cultural learning styles threw further light on why the Bible was, in Charlie's eyes, the most appropriate text to start with, but his own story an unreasonable digression. It was the Bible that he wanted to read. By reading the Bible from the beginning, Charlie was engaging in a real-life performance (point 4), not a contrived learning

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environment. Reading was a context-specific skill (point 8) to be achieved by gradual approximations to reading a particular text from the Bible (point 7). These powerful factors adequately compensated for a text less predictable than one in the learner's own words.

There was much to hearten me in developing a relevant reading strategy. However, there was still one obstacle. I stated in my reading theory that *reading is a discovery/thinking process* and *reading is not a passive activity*. It may be legitimate to compromise on the predictability of the beginning text, but the very nature of what reading is cannot be compromised. Learners are only readers if they learn to read and interact with the text in a critical fashion. To focus purely on oral reading and its acquisition through imitation, repetition, and approximation to the whole may not produce an adequate understanding of reading for the learner. The text needs to be analyzed, not just rote learned and *spieled* back. The literacy worker would need to encourage the learner in critical reading without imposing a feeling of potential failure on the learner. After all, many would have already experienced a sense of failure from previous exposure to *schooling* or other forms of *whiteman's aggression*. The learning environment then needs to be one of friends sitting and learning together and progressing forward from small beginnings, rather than failure to reach irrelevant and unrealistic goals set from outside.

7. STEP FIVE: THE TEACHING OF READING

My next step was to decide how to teach the reading process. For a successful reading strategy, it is best to delay this decision until as late as possible. Too often the 'professionals' come into a literacy program with their ready-made primers and firmly established reading methods. In the long run no time is saved and it can work against establishing any future successful program.

My general conclusions regarding the Kriol program were that it needed to be non-formal, non-institutional, dealing with the whole and not the parts, a real event, and a sharing between equals. It was important to incorporate demonstration and reading together as aspects of Aboriginal learning style, but it was equally important to

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use retelling, discussion, and questioning at both story and phrase level. These later approaches highlight the necessity of *active* reading and dialogue with the text.

The teaching process was reduced to four simple steps to be repeated throughout the reading session. These steps were represented pictorially in the *Kriol Reading Book* to reduce the amount of written instruction. These steps are as follows:

1. The learner opens to the story.
2. The helper reads the whole story expressively to the learner.
3. After reading, the learner and the helper talk together about what the story means.
4. The learner reads the story slowly with the helper, who points to each word as they read along.

This process is repeated at story, phrase, and word level, and finally again at story level to complete the lesson. For example, the first lesson consists of reading, talking, and rereading of the first four verses of Genesis. Then the procedure is repeated again with verse 3 *Brom deya God bin tok, 'Lait!' En lait ben kamat*, then again with the phrase *Brom deya God bin tok*, and finally with the word *Lait*. The lesson concludes with the whole story being read by the helper and then by the learner and helper together.

It is important that at each level the key concept is discussed so the learner realizes that reading is essentially about obtaining meaning from print. To assist this, comprehension activities are set after each story. Such comprehension questions are not meant to be primarily a test of understanding, but rather an activity to encourage the seeking of information from the text. Throughout the lesson, it is important to maintain a nonthreatening learning environment.

8. RESULTS AND RECOMMENDATIONS

The above method has met with a great deal of success during the two years since its implementation. Its strong points are its flexibility in approach and the ability to change pace in relation to the speed of the learner. Learners set the pace through their proficiency at reading

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and rereading the text, rather than through a set of predetermined exercises. This has been very important as learners have ranged from the totally illiterate, as in the case of Charlie, to transfer readers from English to Kriol, some of whom already know what reading is about. The span of lessons has ranged from three to four months on a daily basis to one half-hour lesson.

The method encourages learners to help each other. Reading lessons usually involve small family groups or individuals. Once a learner in a group acquires proficiency in a particular passage, he or she then can become the helper of others in the group by taking the lead in group reading. Despite its simplicity, the method has not developed into an each-one-teach-one program because of cultural taboos and close family ties.

A feeling of learner success stems from the fact that reading together strengthens the personal relationship between the helper and learner. Instead of asking, "Can you read?" thus inviting a sense of failure, a helper asks, "What have we learned from this story and can you read some of it along with me?" The method cannot operate without a sharing of self. Joint learning is occurring; it is never merely the passing on of abstract knowledge from one to another. Such learning is not measured by reading proficiency alone.

Literacy workers must allow the learner's motivations, cultural learning styles and expectations to sift and reorder preconceived convictions. The successful literacy worker must learn the process of holding loosely to favored reading theories, putting aside favored methods, and bringing the world of the learner to bear upon them in a fresh way. It's a process that recognizes that the expectations and world of the learner are the most important factors in learning to read and in the formulation of a strategy for teaching reading. Successful literacy work depends more on an attitude rather than a method, relationships rather than an end goal, people rather than a program, the learner rather than the helper, an evolving process rather than static answers.

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NEWS FROM SHARE

System to Help Access Reports of Effective Education (SHARE)

SHARE is a computerized data-base of educational reports that has been created to help educators access knowledge of all known strategies for improving basic education in the developing world. It is intended for policy makers, program managers, and policy researchers who are constantly in search of insights on *what works* and *under what circumstances*, in the field of education. One potential source of such insights is the cumulative knowledge about the performance of educational projects throughout the world.

This knowledge is available in several forms, all of which are accessible through SHARE: short reports of projects/programs designed for improving educational practice, research on their efficacy, research reviews, and major bibliographic references. The Project is supported by USAID under Project ABEL and hopefully UNICEF will support the Project for field implementation.

The program can be read on any IBM compatible computer and requires a hard disk space of approximately 4m bytes. The data is available on either 5.25″ double density or 3.5″ high density diskettes.

To date, SHARE has been distributed to several institutions on a trial basis and there have been several encouraging remarks. The users have found the data-base to be readily understandable, easy to use, easily accessible and comprehensive. Updates to include more reports are being made all the time. If you have reports that should be included, or would like a copy of the current version, together with an accompanying manual, write to:

Dr. William Cummings or Florence Kiragu, Project Abel
Harvard Institute of International Development
One Eliot Street
Cambridge, Mass. 02138, U.S.A.

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A SOCIOHISTORICAL PHILOSOPHY OF EDUCATION

Joost Pikkert

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1. THE NEED FOR NEW APPROACHES

Many countries are coming to grips with ethnic diversity, but ethnic minorities often remain disadvantaged educationally. Now interest is increasing on how education can be reworked to better meet the needs of these under-represented populations. This paper discusses a sociohistorical philosophy of education that educators should consider when teaching or training in a multicultural setting.

Tension is inherent in any education system. Every person is unique and views the world in a unique way. All are shaped by their culture. No one is isolated from their environment, yet no one is just a product of their environment. The interplay of the individual with the culture makes many of the complexities that teachers face, with multicultural settings compounding these complexities.

2. DYNAMIC EXPERIENCE

Education is more than a series of required skills; it also gives people the ability to use knowledge. Education should be dynamic in giving students the tools to transform their world. In approaching education as a dynamic experience, we avoid teaching a dull and meaningless series of required skills. If education is to be useful to an individual or culture, the recipients must regard education as more than an abstract tool or a series of meaningless skills.

The truly educated person approaches a problem expecting a meaningful, interactive event. As someone applies knowledge to a situation, an experience arises. If, however, learners do not see the

relationship between the taught information and their needs, they will have little motivation for learning.

Education should aim for an *I-Thou* dynamic. This happens when a problem situation or words on paper speak as if they were another person. The problem solver in turn responds with emotions, cognitive agreement or disagreement, or greater inquiry. This dynamic between a person and situation presupposes that we understand the totality of a situation only when we arrange the parts, and as we are able to arrange the parts we understand the whole (Ricoeur 1981). When a person interacts with the text or problem experientially, the person is becoming educated. When a person fails to see a text or problem in a dynamic relationship, individual skills are useless. Having skills that have no relevant, interactive meaning leaves a person without the underlying reason for being educated.

Philosophers often use the *I-Thou* dynamic relationship to understand texts. This idea's application is not limited to just texts. When an aboriginal hunter tracks an animal, he lets his environment speak to him. His text is the tracks of the hunted animal speaking to him in the context of the natural environment around him. The hunter in turn responds by following the trail. Thus his tracking education allows him to look at his environment in an *I-Thou* manner.

Formal education should also use an *I-Thou* dynamic. A reader can get engrossed in a book and vicariously identify and experience the thrills and concerns of a character in the text. Our education materials should also invoke relational experiences. We need to ask ourselves if we are teaching students to *track*, like the aboriginal hunter, through our texts in a meaningful way.

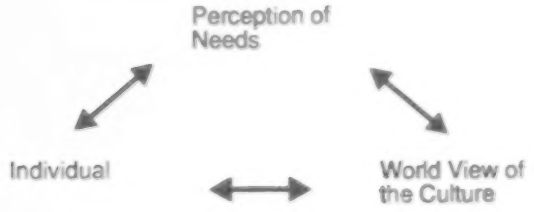
3. WORLD VIEW

To create educational materials and pedagogical strategies in a nonliterate society, we must understand the world view of the people. Paul Radin (1927) points out that every culture, literate and nonliterate alike, has a pattern of basic beliefs. The education system helps carry out that belief system by building useful habits and skills

(Brameld 1955). The skilled educator adapts his education program to the world view of the people.

Education occurs in the context of a people's world view. Educators working in a culture other than their own often are more intent on getting the message out rather than on understanding their audience. Educators need to adjust their message in the light of the world view of the students. The educator gains integrity and credibility by showing an awareness of the cultural perspective of the audience. He shows respect for them, and that he is not trying to undermine their self-worth by destroying the security found in their perception of the world.

To create meaningful materials using an *I-Thou* dynamic, three elements need to be kept in tension with one another. These include (1) the world view of the audience, (2) the audience's perception of need, and (3) the individual within his broader context. If we focus on world view without considering the individual, we slowly lose the *I-Thou* relationships necessary for meaningful education. If we focus on the individual without considering world view, meaningful communication is lost. Though the language may be the same, the message is misunderstood. If world view is emphasized without considering the needs of the people, the teacher may lose the motivational tools needed for continued learning. The tension between these three elements may be diagrammed as follows:



We must understand the tension between these elements to begin an education program that people will support. World view may influence a need in a culture. The western educator may think that

the people need a greater variety of food to improve their diet, but this may be unimportant to people who place greater emphasis on interpersonal relationships.

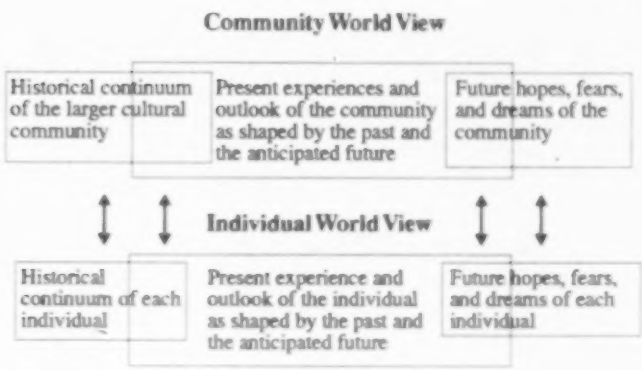
4. HISTORIC CONTEXT

Educators must focus on what is meaningful in the student's historic context. A story describing the struggles of a poor, politically oppressed farmer is more meaningful to a poor, politically oppressed third world farmer than to a sixth grade student from an affluent American family. While the sixth-grader may understand the meaning of the story, it is not meaningful. The sixth-grader probably will not experience an *I-Thou* dynamic relationship with the character in the story.

Historic context is characterized by:

a. A historic past. This includes the history that has shaped a peoples' environment, spiritual understanding, social relationships, political and economic outlook, and cognitive orientations.
b. People in search of hope. This hope is usually some type of liberating experience that may be spiritual, economic, social, or psychological.
c. The tension between being in a historically defined present but looking toward a liberating future.

The teacher and text must break into this context. The teacher needs to understand that even the hopes of the students are conditioned by their historical continuum. The complex understanding of meaning in a monocultural setting may be diagrammed as follows:


Community World View
Historical continuum of the larger cultural community
Present experiences and outlook of the community as shaped by the past and the anticipated future
Future hopes, fears, and dreams of the community
Individual World View
Historical continuum of each individual
Present experience and outlook of the individual as shaped by the past and the anticipated future
Future hopes, fears, and dreams of each individual

5. THE INTERACTION OF EXPERIENCE, WORLD VIEW, AND HISTORY

The educator teaches within this kaleidoscope of interactive factors. Many technology transfer programs were failures because the hope presented by people outside the culture did not match the recipients' own idea of hope. Hope needs to be understood in terms of historical struggles and world view. They may acquiesce initially out of courtesy, but they perceive their needs and hope differently. People from different cultures are motivated by different stimuli. The educator's task is to discover the concepts, information, and emotions that lead people to respond favorably to certain events, ideas, groups, or people (Johnson 1980).

Educators need to point out the strengths in a culture. Whether this is in art, philosophy, crafts, or other, the educator needs to show respect for the world of the student. As the educator appreciates and understands the world view of the audience, he can use terms that fit into their conceptual schema. While this may take a long time, the pay-offs will be worth the work. To spend thousands of dollars setting up a program that is doomed to failure is a disaster. It is better to take the extra year to make the message or technology culturally intelligible, meaningful, and appropriate.

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WITH ONLY SIX LETTERS[1]

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I make the following assumptions about primers (initial reading instruction material):

- Primers should contain liberal quantities of meaningful, natural word sequences (i.e. phrases, sentences, and texts) on which the learner can exercise his or her newly-acquired skill. Indeed, this should be true even in very early lessons.

- The words that the learner encounters in a primer should generally not contain untaught letters, since these can be a source of frustration for the learner. This limitation makes it difficult to create meaningful, natural word sequences. This is particularly acute for the early lessons.

What words are available for each lesson, then, is a direct consequence of the order in which the letters are taught. Therefore the challenge is to find the best order for introducing the letters. Feitelson (1988:48) says: "By judicious and well thought out sequencing of the very first letters, a child can be made aware of the nature of the reading process right from the start."

The purpose of this paper is to demonstrate that a "judicious and well thought out" sequence can be calculated by a computer program, making the primer writer's task easier.

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[1] The following abbreviatory conventions are used below: *fam.* familiar, *fem.* feminine, *imp.* imperative, *lit.* literally, *masc.* masculine, *neut.* neuter, *pol.* polite, *pret.* preterit, *prs.* present, *subj.* subjunctive, *(a)* optionally a, *(a/b)* a or b, *(a/b/c)* a or b or c (etc.).

Gudschinsky (1973) recommended calculating primer sequence based only on the lexical contentives in some collection of text.[2] Presumably, her intention was to maximize the availability of lexical contentives in early lessons. She excluded functors because she considered it best to teach these as sight words, regardless of whether the characters of which they are composed have been taught.

However, if our purpose for calculating primer sequence is to create meaningful sentences and natural texts, and if we assume that functors should not be taught until their letters have been taught, then excluding functors from the calculations yields an inferior primer sequence[3]. This is because functors are essential for creating meaningful, natural text.

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[2]Gudschinsky (1959:10) wrote:

> The use of natural sentences and text is not inconsistent with the controlled introduction of elements if the whole idea of what constitutes productivity of the controlled elements is revised. From the new point of view, an element--letter, tone mark, syllable pattern--is productive to the extent that it can be used to construct natural idiomatic sentences and sentence sequences. The search for this kind of productivity requires a new type of counting based on a careful syntactic and morphological analysis so that the obligatory and permitted parts of each sentence type and word class are known.

She then goes on to sketch a method that favors functors over lexical content words. With reference to this method, Gudschinsky (1973:84, footnote 22) writes,

> I have changed my ideas almost completely about the extent to which we should base the order of introducing letters in the primer on the letters required for the functors.

Gudschinsky changed her opinion because she became convinced that functors should be taught as sight words.

Weber et al. (1991) claims that the order of introducing letters should be calculated from the most frequent *morphemes* including both functors and lexical content words.

[3]See Weber et al. (1991) for a more complete discussion.

Languages generally have thousands of lexical content words. Consequently, for any letter of the alphabet (with perhaps a few exceptions) there will be many "contentives" containing that letter. Thus, for just about any reasonable primer sequence, some lexical contentives will be available from very early on.

By contrast, languages generally have only a few dozen functors. Because they are few, collectively they may not have many of the phonemes of the language. And unlike lexical contentives, there is no guarantee that functors will be available in early lessons unless they are taken into account when calculating the primer sequence. If we calculate primer sequence on the most frequent morphemes--including both functors and lexical contentives, because of the high frequency of functors, the letters of which they are composed are naturally assigned to early lessons.

A computer program has been written to calculate the optimal teaching order (see Weber 1991). I applied this program to Spanish, using a Spanish New Testament (United Bible Societies 1970) as the corpus over which counts were made. The program determined that the first six letters to be taught should be *a*, *e*, *o*, *l*, *s*, and *d*. This paper shows the impressive number of phrases, sentences, and even small texts, that can be constructed with just six letters. Of course, the trick is to get the *right* six letters!

For a language with a small phoneme inventory, finding many available words formed with just six letters would not be too surprising. However, this is not the case for Spanish. Here is a quick summary of the elements that probably need to be taught:

5 Vowels: *a*, *e*, *i*, *o*, and *u*. These all occur either accented or unaccented.

11 Diphthongs: *ai*, *au*, *ei*, *eu*, *ia*, *ie*, *io*, *oi*, *ua*, *ue*, and perhaps *ui*.

12 Consonant clusters: The following consonant clusters occur in syllable onsets: *bl*, *br*, *cl*, *cr*, *dr*, *fl*, *fr*, *gl*, *gr*, *pl*, *pr*, and *tr*.

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20 Single-letter consonants: *b*, *c*[4], *d*, *f*, *g*[5], *h*[6], *j*, *k*[7], *l*, *m*, *n*, *ñ*, *p*, *r*, *s*, *t*, *v*, *x*[8], *y*, and *z*.

6 Digraphs: *ch*, *gu*[9], *gü*[10], *ll*, *qu*[11], and *rr*.

Accent marks: Examples: *deseo* 'I want' versus *deseó* 'he wanted', *esté* 'that it be' versus *éste* 'this.'

In addition to 54 elements, we might also teach the following:

Extrametrical /s/: /s/ may follow another consonant in the syllable codas: *bs* /bs/ (e.g. *obstáculo*, *obstante*), *ls* /ls/ (e.g. *vals solsticio*), *ns* /ns/ (e.g. *monstruo*), *ps* /ps/ (e.g. *bíceps*) and *rs* /rs/ (e.g. *perspicacia*).

aa: The sequence *aa* occurs in Biblical names: *Isaac*, *Aaron*, *Naasón*, *Balaam*, *Naamán*, *Maat*, and *Baal*.

Consonants in coda position: The following consonants occur in syllable codas: *b*, *c*, *d*, *g*, *l*, *m*, *n*, *p*, *r*, *s*, *x*, *y*, and *z*. Some reading instruction methods would teach these as separate elements than

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[4]This really involves two letter-sound correspondences: before *e* and *i*, *c* represents /s/ (e.g., *centavo* /sentavo/, *cien* /syen/) but before *a*, *o*, and *u* it represents /k/ (e.g., *canto* /kanto/, *coco* /koko/, *cumbre* /kumbre/).

[5]Like *c*, this has two letter-sound correspondences: before *e* and *i*, *g* represents /x/ (e.g., *gente* /xente/, *gitano* /xitano/) but before *a*, *o*, and *u* it represents /g/ (e.g., *gato* /gato/, *gozo* /goso/, *gusto* /gusto/).

[6]And perhaps *hu* as a separate element representing /w/, as in *hueso* /weso/.

[7]For example, *kilo*, *kilometro*, and *kola*.

[8]*x* represents /ks/, e.g., *expulsar* /ekspulsar/, *sexta* /seksta/, *félix* /feliks/. Teaching *x* may require additional effort because its /s/ is "extrametrical."

[9]*gu* before /e/ and /i/ represents /g/ (e.g., *guiso* /giso/).

[10]*gü* represents /g[w]/ before /i/ and /e/ (e.g., *vergüenza*).

[11]*qu* represents /k/ before /e/ and /i/ (e.g., *quitar* /kitar/, *quedar* /kedar/).

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the corresponding letter in the syllable onset. (Although the following occur in syllable codas, they would probably not need to be taught because of their low frequency: syllable-final *f* (e.g. *Neftalí*), syllable final *t* (e.g. *Lot*, *Set*) and syllable-final *j* (e.g. *reloj*).)

In light of all these elements, it is impressive how many words, phrases, and sentences can be formed with just six letters. But, of course, these are not just *any* six letters: they are the *best* six for this purpose, as calculated by the above-mentioned computer program.

Of the 100 most frequent words in the the Spanish New Testament (United Bible Societies 1970), those underlined in the following table are composed of only the letters *a*, *e*, *o*, *l*, *s*, and *d*. (The number to the left of each word indicates its frequency in that text, i.e. the number of times it occurs.)

8582	de	1073	las	445	había	297	pablo
8396	que	1014	como	445	ni	296	ley
7258	y	898	porque	435	fue	293	vida
6638	a	788	una	415	qué	290	sin
4775	el	765	si	412	entonces	289	bien
4694	la	740	sus	410	cristo	288	estaba
4125	los	730	él	408	nos	288	o
3721	en	723	dijo	404	mismo	286	uno
2824	no	715	cuando	402	gente	285	fe
2477	se	707	señor	393	son	282	sobre
2282	lo	704	me	383	padre	279	entre
2103	dios	699	ha	376	te	278	después
2034	por	675	yo	375	está	275	ser
1705	jesús	656	pues	369	este	272	eso
1590	para	646	también	352	espíritu	266	mí
1580	con	615	todos	340	sino	261	ahora
1553	ustedes	597	ellos	339	han	256	mensaje
1477	su	564	así	334	nosotros	255	hasta
1448	del	562	esto	325	día	252	esta
1420	al	536	todo	309	otros	245	era
1290	pero	489	hombre	307	tu	243	cielo
1266	les	471	ya	306	mundo	242	discípulos
1238	es	469	mi	300	hermanos	238	contestó
1156	le	456	más	298	cosas	237	hacer
1106	un	448	hijo	298	judíos	233	tiene

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The Spanish New Testament has 187,674 total words, of which 44,104 are composed of only *a, e, o, s, l,* and *d*. Thus, these six letters enable the learner to read 23.5% of the words in the Spanish New Testament! All the available words and their frequencies are given in the following table:

8582	de	132	sea	17	sed	5	dáselo	1	ola
6638	a	132	dado	17	esas	4	sala	1	lees
4775	el	1130	desde	16	deseo	4	lee	1	lasea
4693	la	129	ese	14	ése	4	lados	1	deseosos
4125	los	119	da	12	seas	4	ésos	1	deseado
2477	se	91	esa	12	aldeas	4	dados	1	desea
2282	lo	69	sólo	11	soldado	4	dada	1	dele
1448	del	66	solo	10	olas	3	des	1	dedos
1420	a	156	sé	9	sale	3	das	1	dales
1266	les	55	deseos	9	sal	3	dale	1	dadas
1238	es	48	soldados	8	aldea	2	solos	1	asado
1156	le	45	esos	7	edad	2	aso	1	alados
1073	las	38	sola	7	dedo	2	asa	1	áloe
730	él	38	lado	6	alas	1	seda		
288	o	31	sol	5	solas	1	salados		
272	eso	27	e	5	salada	1	oso		
180	dos	24	dé	5	lodo	1	oseas		

CLASSIFICATION OF WORDS BY SYNTACTIC CATEGORY

This section lists the available words by their syntactic category.[12] (Some of these are flagged by an asterisk to indicate that they are not

[12]In addition to the words found in the Spanish New Testament, a few more were found in the University of Chicago's Spanish-English Dictionary (Castillo and Bond 1948).

usable because they are either unknown or limited to learned vocabulary. Some words could be used with adults but not children. Others would not be appropriate for people for whom Spanish is a second language.)

ADJECTIVES AND PARTICIPLES: *alad(a/o)(s)* 'winged', *alelad(a/o)(s)* 'stupified', *asad(a/o)(s)* 'roasted', *(des)asead(a/o)(s)* '(un)tidy', *dad(a/o)(s)* 'given', *deseos(a/o)(s)* 'desirous', *desead(a/o)(s)* 'desired', *desolad(a/o)(s)* 'desolate', *dos* 'two', *(des)leal(es)* '(dis)loyal', **lel(a/o)(s)* 'dull', *lodos(a/o)(s)* 'muddy', *oleos(a/o)(s)* 'greasy', **osad(a/o)(s)* 'bold', *salad(a/o)(s)* 'salty', *sedos(a/o)(s)* 'silky', *sol(a/o)(s)* 'alone', *(a)solead(a/o)(s)* 'sunned', **soso* 'tasteless'

ARTICLES: *el* 'the (masc.)', *al* 'to the (masc.)', *del* 'from the (masc.)', *la* 'the (fem.)', *los* 'the (pl.masc.), *las* 'the (pl.fem.), *ese* 'that (masc.)', *esa* 'that (fem.)', *esos* 'the (pl.masc.)', *esas* 'the (pl.fem.)'

CONJUNCTIONS: *e* 'and', *o* 'or'

SUBSTANTIVES: *ala(s)* 'wing', *aldea(s)* 'village', **as(es)* 'ace', *asa(s)* 'handle', *asado(s)* 'roast meat', *dado(s)* 'dice', **dale-dale(s)* 'type of tuber', *dedal(es)* 'thimble', *dedo(s)* 'finger', *desaseo(s)* 'untidiness', *deseo(s)* 'desire', **dosel* 'canopy', *edad(es)* 'age', *lado(s)* 'side', *lodo* 'mud', *losa(s)* 'flagstone (dishes?)', **oda* 'ode', *ola(s)* 'wave', *oleada(s)* 'big wave', **oleo* 'grease', *oso(s)* 'bear', *sal* 'salt', *sala(s)* 'livingroom', *saldo* 'balance', *salsa(s)* 'sauce', *sed* 'thirst', *seda* 'silk', *sede* 'center', *seso(s)* 'brain', *sol(es)* 'sun/monetary unit', *soldado(s)* 'soldier', *soledad* 'solitude', **sosa* 'soda'

PREPOSITIONS: *a* 'to', *al* 'to the (fem.)', *de* 'from', *del* 'from the (masc.)', *desde* 'since, all the way from'

DEMONSTRATIVE PRONOUNS AND ADJECTIVES: *él* 'he', *éso* 'that (masc.)', *ésa* 'that (fem.)', *ése* 'that (neut.)', *ésos* 'those (masc.)', *ésas* 'those (fem.)', *lo* 'him', *la* 'her', *le* 'it', *los* 'them (pl.masc.)', *las* 'them (pl.fem.)', *les* 'to them', *se* '(reflexive/indefinite)'

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VERBS:

VERBS ENDING IN *-ar*

	1prs.	2prs.	3prs. imp. fam.	1pret	3pret	1&3 subj. imp. pol.	2subj.
alear 'flap':	*aleo*	*aleas*	*alea*	*alcé*	*aleó*	*alee*	*ales*
asar 'roast':	*aso*	*asas*	*asa*	*asé*	*asó*	*ase*	*ases*
asear 'tidy':	*aseo*	*aseas*	*asea*	*aseé*	*asó*	*asee*	*asees*
asolar 'raze':	*asolo*	*asolas*	*asola*	*asolé*	*asoló*	*asole*	*asoles*
dar 'give':		*das*	*da*			*dé*	*des*
desear 'want':	*deseo*	*deseas*	*desea*	*deseé*	*desceó*	*desee*	*desees*
ladear 'tilt':	*ladeo*	*ladeas*	*ladea*	*ladeé*	*ladeó*	*ladee*	*ladees*
loar 'praise':	*loo*	*loas*	*loa*	*loé*	*loó*	*loe*	*loes*
osar 'dare':	*oso*	*osas*	*osa*	*osé*	*osó*	*ose*	*oses*
salar 'salt':	*salo*	*salas*	*sala*	*salé*	*saló*	*sale*	
saldar 'sum':	*saldo*	*saldas*	*salda*	*saldé*	*saldó*	*salde*	*saldes*
(a)solear 'sun':	*soleo*	*soleas*	*solea*	*soleé*	*soleó*	*solee*	*solees*

VERBS ENDING IN *-er* AND *-ir*[13]

	1prs.	2prs.	3prs.	imp.fam..	1&3subj	2subj
leer 'read':	*leo*	*lees*	*lee*	*lea*	*lea*	*leas*
saber 'know':	*sé*					
ser 'be':			*es*	*sé*	*sea*	*seas*
salir 'go out':		*sales*	*sale*	*sal*		

PROPER NAMES: *Adela, Elsa, Lola, Lolo, Oseas, Soledad*

ADVERBS: *solo* 'only'

FIXED EXPRESSIONS: *a eso de* 'at about', *a solas* 'alone', *al lado (de)* 'along side (of)', *de lado* 'along side', *de sol a sol* '?', *(el/la/lo) de* 'that (masc./fem./ neut.) belonging to', *eso es* 'that is', *lado a lado* 'side by side'

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[13]There are also some irregular verbs: *desolar* 'raze', *doler* 'hurt', *dolerse de* 'suffer pain from', *oler (a)* 'smell (like)', *solar* 'pave', *soldar* 'solder', *soler* 'happen.' The past participle of the *-ar* verbs is available, e.g., *desolado* 'desolate', *soldado* 'soldered', but beyond these, the only available forms are the archaic: *¡Doled!* 'Be in pain!', *¡Oled!* 'Smell!', etc.

PHRASES

Noun phrases (NP)

SIMPLE: A noun phrase can simply be a pronoun (*él* 'he'), a proper name (*Elsa* 'Elsa') or simply a noun. However, nouns usually occur with an article or number:[14]

el	*dedo*	*el*	*ala*	*el*	*dado*	*el*	*sol*	*el*	*dedal*	*el*	*soldado*
los	*dedos*	*las*	*alas*	*los*	*dados*	*los*	*soles*	*los*	*dedales*	*los*	*soldados*
dos	*dedos*	*dos*	*alas*	*dos*	*dados*	*dos*	*soles*	*dos*	*dedales*	*dos*	*soldados*

We can combine an article or demonstrative adjective and a number (ART (NUM) NP): *los dos soldados* 'the two soldiers', *esos dos soldados* 'those two soldiers', etc.

APPOSITIVE: *el soldado Lolo* 'the soldier Lolo' or *Lolo el soldado* 'Lolo the soldier.'

CONJOINED PHRASES (NP'S, AP'S, AND PP'S): *¿éste o ése?* 'This (one) or that (one)?', *(de) Adela o (de) Soledad* 'Adela('s) or Soledad('s)', *Lolo o el soldado* 'Lolo or the soldier', *de Lolo o del soldado* 'from Lolo or from the soldier', *de la sede o de la aldea* 'from the center or from the village', *aseado o desaseado* 'tidy or untidy', *la salsa de sesos o el oso asado* 'the brain sauce or the roast bear.'

La edad del soldado, ¿es la de Adela o de Elsa o de Soledad o de Lolo? 'The soldier's age, is it that of Adela or of Elsa or of Soledad or of Lolo?'

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[14]We note that the noun phrases listed in the text are quite "picturable" and could thus serve by themselves as captions to appropriate pictures. Here are some other such phrases: *dos dados, lado al lado* 'two dice, side by side', *Adela, a lado del soldado* 'Adela beside the soldier', *los dos dedos del soldado* 'the soldier's two fingers'.

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NP PARTICIPLE: *sesos asados* 'roast brains', *ese asado salado* 'that salty roast', *el asado dado al soldado* 'the roast given to the soldier', *dos asas soldadas* 'two soldered handles', *la sala (des)aseada* 'the (un)tidy livingroom.'

WITH A PREPOSITIONAL PHRASE: see next section.

Prepositional phrases

P NP: Ownership: *del soldado* 'of the soldier'
Spatial: *(al/del) (sol/lodo)* '(into/out of) the (sun/mud)', *a esos dos soldados* 'to those two soldiers', *(a/de/desde) (la sala/la aldea/la sede)* '(to/from/all the way from) the (livingroom/town/center)', *(al/del/desde el) lado de la aldea* '(to/from/all the way from) the side of the town', *desde la sede a las aldeas* 'from the center to the towns', *de los dos lados* 'from the two sides', *de los dedos de Soledad* 'from Soledad's fingers'
Temporal: *a las dos* 'at two o'clock', *a eso de las dos* 'at about two o'clock', *desde las dos* 'since two o'clock', *a la edad de dos* 'at the age of two.'

NP = NP PP: Prepositional phrases can be semantically related to noun phrases in various ways:
Ownership: *(el asado/los dados/los deseos/la seda) (de Adela/del soldado)* 'the (roast/dice/wishes/silk) of (Adela/the soldier)'
Patient: *el aseo de la sala (de los soldados)* 'the tidying of the (soldiers') livingroom'
Location: *la losa de la sala* 'the tile of the livingroom', *la soledad de la aldea* 'the solitude of the village'
Experiencer: *el deseo de Elsa* 'Elsa's desire'
Part-whole: *la sal de la salsa (del asado)* 'the (roast's) sauce's salt' (lit., the salt of the sauce of the roast), *los dos dedos del soldado* 'the soldier's two fingers'
Agent: *la salsa de Soledad* 'Soledad's sauce' (i.e. the sauce Soledad made).

Verb phrases

[CLITIC V] AND [V CLITIC]: Verbs combine with the clitic pronouns as follows: *d(a/e)le(s)* 'give(fam./pol.) it to (him/her/them)', *dásel(a/o)(s)* 'give(fam.) them(fem./masc.) to (him/her/them)', *désel(a/o)(s)* 'give(pol.) them(fem./masc.) to (him/her/them)', *l(a/e/o/)(s) da* '(he/she/it) gives (it/them) (to (him/her/them))', *se l(a/e/o)(s) da* '(he/she/it) gives it/them to (him/her/them) (for (his/her/their) benefit)'
The clitics may be used for direct or indirect objects, e.g., *Lo deseo.* 'I want it.' or *Le da.* 'He gives it to him.' In the following, *le* is a "dative of benefit": *El sol le sale a Adela.* 'The sun comes out for Adela.'

V ADV: . . . *(lee/sale) a solas* '(reads / goes out) alone.'

V NP: . . . *dese(a/o) ((la) seda/(el) asado/(la) sal)* '(he/I) want (the) (silk/roast/salt)', *¿Deseas los dos?* 'Do you want both?', . . . *desea (el/la) de Soledad o (el/la) de Adela* '. . . wants Soledad's or Adela's', . . . *sala la salsa* '. . . salts the sauce', *se le dá a los dos soldados de la aldea*, 'is given to those two soldiers from the town', *Deseo el aseo de la sala de los soldados.* 'I want the tidying up of the soldiers' livingroom.'

ADV V NP: *Solo deseo (la salsa/la soledad de la aldea).* 'I only want (the sauce/the solitude of the village).'

V PP: . . . *sale de la sala (de Lola)* 'he leaves the (Lolo's) livingroom', *El lodo sale de los dos lados.* 'The mud comes out both sides.' . . . *sale de sed* 'he leaves out of thirst', *(El sol) da al lado de la aldea.* '(The sun) shines on the side of the village.'

V NP PP: . . . *da sed al soldado* 'makes the soldier thirsty', *El dedal sale del dedo de Elsa.* 'The thimble comes off Elsa's finger.' *Dale (solo) la salsa del asado a esos dos soldados.* 'Give those two soldiers (only) the sauce of the roast.'

es ADJ: . . . *es* *(salad(a/o)/desolad(a/o)/desead(a/o)/lodos(a/o)/sedos(a/o))*. '. . . is (salty/desolate/desired/muddy/silky)', . . . *¿es de Adela o es de Soledad?* '. . . is it Adela's or Soledad's?'

IO *es* ADJ: *..les es salado* 'it is salty to them.'

SENTENCES

Different word orders

Spanish allows the subject to precede or follow the verb phrase: NP:SUBJ VP: *El asa sale.* 'The handle comes off.' VP NP:SUBJ: *Sale el sol.* 'The sun comes out.'

Objects normally follow the verb, but may be fronted: *A los soldados, les es salado.* 'To the soldiers, it is salty.' *A los dos, el sol asolea.* 'The sun shines on both of them.'

Sentence-level prepositional phrases may precede or follow the main clause:

PP S: Temporal: *A la edad de dos, el oso (sale a solas/desea sal).* 'At the age of two, the bear (goes out alone/wants salt).' *A las dos, el sol da al lado de la aldea.* 'At two o'clock, the sun shines on the side of the town.' *A eso de las dos, el oso sale (al sol/del lodo).* 'At about two o'clock, the bear goes out into the (sun/mud).' *A eso de las dos, el sol da sed a los soldados.* 'Along about two o'clock, the sun makes the soldiers thirsty.'

Locational: *De las aldeas sale la sal.* '(The) salt comes from the villages.' *Del lado de la aldea sale el sol.* 'The sun comes up from the side of the village.'

S PP: *Se asolea a eso de las dos.* 'One sun's himself at two o'clock.'

Many other combinations are possible.

Different types of sentences

GENERIC: *(La) sal da sed.* 'Salt makes one thirsty.'

IMPERSONAL: *se le da . . .* 'one gives him', *Se solea al sol.* 'He suns himself in the sun.'

PREDICATE NOMINAL: *El saldo es dos soles.* 'The balance is two soles.' *La edad de Adela es la de Lola.* 'The age of Adela is that of Lola.' *La aldea de Lolo es la de Adela o es la de Soledad.* 'Lolo's village is that of Adela or that of Soledad.'

PREDICATE ADJECTIVE: *es salad(a/o)* 'it is salty', *(La sala) es (desaseada/lodosa) de lado a lado.* '(The livingroom) is (untidy/muddy) from one side to the other.' *El soldado es deseosos del seso asado.* 'The soldier is desirous of the roast brain.' *El deseo del soldado (es la soledad/el (seso) asado).* 'The soldier's desire is (solitude/roast (brain)).'

IMPERATIVE: *¡Sea leal!* 'Be loyal!'

INTERROGATIVE: *¿Es el soldado leal o desleal?* 'Is the soldier loyal or disloyal?' *El soldado, ¿es leal o desleal?* 'The soldier, is he loyal or disloyal?'

OTHER: *Sea de Lolo o del soldado, Soledad desea seda.* 'Whether from Lolo or from the soldier, Soledad wants silk.'

Sea esa la de Lolo, o (sea esa) la del soldado, la deseo. 'Whether that is the one belonging to Lolo or (whether that is) the one belonging to the soldier, I want it.'

SMALL TEXTS

This section includes sequences of two or more connected sentences such as might be used in a primer either as text or to caption a sequence of pictures. Such sequences should avoid too much repetition. Adams (1990:322) writes:

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> Research has shown that text that is composed of high proportions of orthographically and phonologically similar words is inordinately difficult to process. Even when read silently by skillful readers, such texts produce the disruptiveness of tongue twisters.

The danger of repeating "orthographically or phonologically similar words" is particularly acute at this point because the words used are formed from so few letters (phonological segments).

On the other hand, repetition is positive in that a word becomes easier for the student to read each time, with its recognition ultimately becoming automatic.

So the trick is to make texts that sound natural, ones that repeatedly use the same words, but where words are not distributed in such a way that they are hard to read.

El oso desea sal. ¿Se le da sal al oso?

'The bear wants salt. Should one give salt to the bear?'

El soldado desea sal. Dále sal al soldado. Dáselo. Dále sólo a ese soldado.[15]

'The soldier wants salt. Give the salt to the soldier. Give it to him. Give it only to that soldier'

El asado de Elsa es salado. El de Lola ¿es salado? Sea el de Elsa o el de Lola, el asado es salado.

'Elsa's roast is salty. Is Lola's salty? Whether Elsa's or Lola's, the roast is salty.'

El soldado desea dados. Desea los de Lolo. Adela se los da. Le da los dados al soldado. Adela le da los dos dados de Lolo.

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[15]or this could be plural: *Dáles (la) sal a los soldados. Dáselos. Dáselos sólo a esos dos soldados.* 'Give the salt to the soldiers. Give it to them. Give it only to those two soldiers.'

'The soldier wants dice. He wants those that belong to Lolo. Adela gives them to him. She gives the dice to the soldier. She gives him the two that belong to Lolo.'

Adela desea la seda. La seda es el deseo de Adela. Lola da la seda a Elsa. La seda, deseo de Adela, es dada a Elsa. Adela sale de la sala. Desea la soledad. Sale a la aldea. Sale a solas. Desea la soledad de la aldea.[16]

'Adela wants the silk. The silk is Adela's desire. Lolo gives the silk to Elsa. The silk, Adela's desire, is given to Elsa. Adela leaves the livingroom. She wants solitude. She leaves for the town. She leaves alone. She wants the solitude of the town.'

[Comprehension question: *La seda, ¿es de Adela o es de Elsa?* 'The silk, does it belong to Adela or to Elsa?]

La edad de Adela es la de Elsa. La de Elsa es la de Soledad. La edad de Soledad, ¿es la de Adela?[17]

'The age of Adela is that of Elsa. That of Elsa is that of Soledad. Regarding the age of Soledad, is it that of Elsa?'

CONCLUSION

Of the 50 or more elements that need to be taught in a Spanish primer, the six best letters with which to begin make available 23.4% of the words of the text on which the calculations were based. These include a limited--but workable--set of lexical content words as well as the functors necessary to combine them into meaningful sentences and small texts. With this limited vocabulary, a surprisingly wide range of syntactic constructions are possible.

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[16]This might be a good as a captioned picture story or cartoon.

[17]This is a sort of puzzle, requiring an awareness that "being the same age" is a transitive relation.

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The key to getting such impressive results is to get the right letters with which to begin the primer. This can now be calculated using the computer programs described in Weber et al (forthcoming).

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ABSTRACTS

Barber, Betsy A. Lawhead. 1983. Pre-reading exercises for Indochinese refugees: Theory and practice. M.A thesis, University of Texas at Arlington. 170 pages. (Available from the editor, *Notes on Literacy*).

Betsy Barber is an SIL member who worked as a literacy specialist with the Slave language project, North America branch. She is studying for a doctorate in clinical psychology at Biola University, La Mirada, California.

This paper reviews theories of reading and their application in literacy methods, with emphasis upon the Gudschinsky Method. These conclusions are then practically applied to the development of a tool which a volunteer instructor can use to prepare a non-English speaking, pre-literate Indochinese refugee for entry into a basic ESL program. The practical application of the theories discussed is demonstrated by the inclusion of Advanced Pre-reading Exercises and A Teacher's Guide to the pre-reading exercises found in this paper and in the paper, Pre-reading Exercises for Indochinese Refugees: History and Purpose, by Stephen Joseph Barber.

Barber, Stephen Joseph. 1983. Pre-reading exercises for Indochinese refugees: History and purpose. M.A. thesis, University of Texas at Arlington. 226 pages. (Available from the editor, *Notes on Literacy*).

Stephen Barber is an SIL member who worked as a literacy specialist with the Slave language project, North America branch. He is working on a doctorate in missiology at Biola University, La Mirada, California.

Due to the turmoil in Southeast Asia, there have been a large number of refugees arriving in the United States in the last few years who have a very low level of education. They are hindered in their adaptation to the United States both by their lack of English and by their lack of reading skills in any language. Their own languages have

some characteristics that are similar to English, and some that are dissimilar. There are few English as a Second Language courses designed to help these pre-literate, non-English speaking people. The pre-reading presented here, along with the exercises and teacher's guide presented in Betsy Barber's paper, are designed to prepare the pre-literate student to take a standard English as a Second Language course.

Pikkert, Joost Johannes Jan. 1990. A case study approach to adult learners and philosophies of education. Ph.D. dissertation, University of Nebraska. 206 pages. (Available from UMI, order # 91-21934).

Joost Pikkert is an SIL member working as a literacy specialist in the Philippines.

The purpose of this study was to identify the factors that may contribute to the development of the philosophies of education among adult learners. By using interviews, classroom observations, and evaluations of documents, philosophies were interpreted and compared. The philosophical categories were those of Liberal, Behaviorist, Progressive, Humanism, and Radical adult education (Merriam, 1980).

The sample was chosen on a selective basis in order to include people of differing racial, and socioeconomic background. All students were involved in some type of adult education program. All subjects were interviewed in the Lincoln-Omaha area. The sample was not controlled but allowed to emerge as the research progressed. Findings were validated using triangulation of interviews, observations, and documents.

All subjects were categorized according to the schema developed by Frankena (1962). Ultimate Aims, Nature of People, Excellencies to be Produced, and How to Produce Excellencies, were the major categories under which emerging data was classified.

Results showed that personality, ethical or religious values, and a student's developmental needs according to Maslow's hierarchy to be the determining factors which created a need for a certain philosophy of education. Each of these factors was affected by the environment in which the subject found themselves. Philosophies of education varied by need, and there was no uniformity among sexes, socioeconomic classes, or races.

Findings suggest the need for institutions of higher education to train teachers that can determine a student's need based on criteria identified in this study. Teachers need to be aware of student's environment, and how this environment affects his/her personality, religious/ethical views, and interpretation of their needs according to Maslow's hierarchy of needs.

Trudell, Joel Dean. 1990. An ethnographic study of Quechua literacy practices among members of a Protestant church in Lima, Peru. M.A. thesis, University of Texas at Arlington. 106 pages. (Available from the editor, *Notes on Literacy*).

Joel Trudell is an SIL member working with the Peru branch as a literacy and non-print media specialist.

This study examines the nature of literacy among a group of people who speak an Indian language (Ayacucho Quechua) of Peru. It focuses on Quechua speakers who are members of a Protestant church in Lima, and how they employ reading and writing in their daily lives. An important feature of this study is that it uses ethnographic research techniques to examine Quechua literacy practices in the church and home. It relates literacy activities in the church service to the larger context of language preferences, home reading habits, religious and educational history, and the reading materials themselves. The goal is a description of how Quechua speakers themselves define and use vernacular literacy in their daily lives.

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Trudell, Barbara Louise. 1991. Factors affecting literacy in Spanish and the vernacular among Indian communities of the Peruvian Amazon. M.A. thesis, University of Texas at Arlington. 198 pages. (Available from the editor, *Notes on Literacy*).

Barbara Trudell is an SIL member working with the Peru branch as the literacy coordinator.

This study examines historical, sociolinguistic, and educational factors which have affected literacy acquisition in Spanish and the vernacular among six minority ethnolinguistic groups of the Peruvian jungle. The history of each group is traced, from its initial contact with the outside world up to the present. Characteristics of ethnic identity and language use are identified, using three distinct models of ethnicity and language/culture maintenance. Development of educational programs in each group is also examined. Finally, profiles are constructed for the groups studied, and factors are identified which appear to have influenced literacy acquisition in Spanish and in the vernacular among those groups.

Swanson, M. Jeanne. 1989. The impact of acculturation experiences on five Southeast Asian refugee families in the United States: Implications for adult education. Ph.D. dissertation, University of Michigan. 360 pages. (Available from UMI, order # 89-20622).

Jeanne Swanson served with SIL 1956-1976 in Mexico, Peru, and Bolivia as a public health nurse who trained health promoters and midwives. In 1990, she returned to Colombia to assist with courses for writers and editors of health-related vernacular literacy materials. She now works on Project '95 for the International Anthropology Department, Dallas.

As the world's refugee population greatly expands, the refugee issue is becoming a global problem. Since the communist take-over of their homelands in 1975, nearly three-quarters of a million Southeast Asian refugees have settled in the United States. Thousands in

refugee camps continue to wait for resettlement. Unlike immigrants who left their homelands voluntarily, refugees fled because of war or because of changes in national regimes, attitudes and borders. Many fled from Southeast Asia expecting their departure to be temporary. They were subsequently dispersed to places where they encountered a new language, unemployment, social isolation, racial tension, and a vastly different lifestyle. The problems resulting from language differences and cultural estrangement often led to self-estrangement. While the refugee's problems have become less acute, they are not less significant or less numerous. The mental health issues affecting their future are a vital concern to educators, as well as to sociologists, anthropologists, health professionals, economists and others.

The purpose of this study is to understand the meaning of the acculturation experience of five Southeast Asian refugee families, to determine the factors or conditions that they perceived to be most essential to (or obstructive of) their adjustment, and to propose effective ways of meeting the needs of such refugees in the context of formal adult education programs.

Using a qualitative approach and a variety of methods, including in-depth interview and informal conversations in family and community settings, the lived-world of three highland Lao and two Vietnamese refugee families was the focus of research. Most interviews were held in the refugees' homes or a business office; interviews were transcribed from tape recordings or notes. These case study investigations uncovered the refugees' empirical world as they unfolded their thoughts and feelings about their adjustment to the United States, and the hope which they envisioned for their future. This study describes the refugees' social and cultural backgrounds, the social contexts from which they originated, and the impact of their past experiences on their present situation.

The peasant highland Lao and urban Vietnamese families included in this study were different yet similar. They differed culturally and educationally and, therefore, contrasted in the ways they responded to their alienation, as well as in the ways they adapted to American society. They varied according to age and socio-economic background, prior exposure to the English language and to American

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culture, and to the severity of their war and post-war experiences. The Vietnamese were better educated than the highland Lao before their arrival in the United States. Therefore, the Vietnamese tended to be more highly motivated toward educational achievement, and were better prepared to enter competitive educational and occupational communities after their arrival, than were the highland Lao. Both groups were challenged by the alienation they experienced as strangers in a land that was not prepared to receive them. Mastery of the English language, meaningful work, a united family, a supportive sponsor and ethnic-religious community, a supportive health and welfare system, a positive personal perspective and a sense of control over their own destiny were the principal factors enabling refugees to cope with their adjustment. Adult educators are challenged to discover ways in which the refugees may integrate into American society effectively while sensitively responding to their unique need, profound differences, and largely untapped potential.

Malone, Susan. 1988. Partners in change: Developing receptor-oriented cross-cultural innovation programs. M.A. thesis, Fuller Theological Seminary School of World Mission. 176 pages. (Available from the editor, *Notes on Literacy*).

Susan Malone, a member of SIL, has been involved in developing literacy programs in Papua New Guinea, both at local and national levels.

This study is for cross-cultural innovation advocates. It is about developing innovation programs that are *owned* by the people they are meant to benefit. The problem that is addressed is, How can cross-cultural advocates of change develop and introduce innovation programs that are ethical (they affirm and support traditional cultures, languages and people) and effective (both advocate and acceptors agree that the changes resulting from the innovation are appropriate to the culture and beneficial to the society)?

Insight drawn from actual innovation programs are explained and extended through discussion of theoretical concepts from

anthropological and communication literature. Practical insights and theoretical conclusions are then used to construct a set of principles which undergird receptor-oriented innovation programs. The principles cover each phase from advocate preparation and training to implementation of an innovation in its accepting society. Finally, based on the principles, general guidelines or *rules* for developing receptor-oriented innovation programs are presented.

This is a descriptive study based on thirteen years of experience as a cross-cultural innovation advocate and on studying the experiences of others--especially those who have been affected by innovation programs. Anthropological, missiological, and communication literature provide the theoretical concepts used in the study.

Tremper, Mark W. 1985. Current principles of orthography design: A study of orthography development in North America and Colombia. M.A. thesis substitute, University of Texas at Arlington. 65 pages. (Available from the editor, *Notes on Literacy*).

Mark Tremper is an SIL member working as a linguistics and translation specialist with the Eastern Keres language program, North America branch.

During the spring of 1985, while writing a brief paper on factors influencing the design of writing systems, I became aware of the limited amount of current data and discussion on the topic of orthography design. Though I did locate several articles with a few innovative suggestions written in the last fifteen years, the most comprehensive and authoritative book on the subject was published 22 years ago (Smalley 1963b). Knowing the extensive field work being carried out by the Summer Institute of Linguistics, other organizations, and individual linguists, I became convinced that there must be numerous language situations being faced and decisions being made that would shed new light upon the recognized principles of orthography design, or, at least, affirm them. I wondered whether a compilation of new data would also serve as a resource for other field

workers facing, or soon-to-be-facing, similar decisions of how best to represent a language for the first time on paper.

Little did I realize that as the seed of this project began to form that the International Literacy Department of the Summer Institute of Linguistics had a similar concern. The coordinator of this department, Dr. Thomas H. Crowell, and his staff, have had a desire to produce a training manual in the techniques and principles of orthography design. Data from several international field operations had already been solicited for this purpose. Some of this data is incorporated into this project, and thus the compilation I was considering could serve as a further resource for this training manual.

The purpose of the project, then, is two-fold. The first purpose is to gather data from field linguists regarding the orthography situation of their programs and to analyze the data in light of the basic principles of orthography design found in the literature through the last several decades. One important question is whether the current data will affirm certain principles and/or whether the work being done needs to give greater emphasis to any of these principles. The second purpose is to compile data and information which can further broaden the resource of strategies for the preparation of writing systems.

This paper begins with a discussion of basic principles proposed for the development of writing systems. These principles are then summarized and their key issues made explicit for the purpose of analyzing the data. The methodology used for the collection of data, including the background behind the design of the survey instrument, is then described. This is followed by a principle-by-principle analysis and discussion of the data looking for trends and patterns in relation to the principles. The analysis is followed by conclusions, concerns for future work in the discipline, and the appendices which present the survey instruments used to gather the necessary data.

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Wilson, Lois Jean. 1991. Considerations for braille primer design. M.A. thesis, University of Texas at Arlington. 175 pages. (Available from the editor, *Notes on Literacy*).

Lois Wilson is an SIL member who worked in Togo as a Braille literacy specialist from 1987 to 1989.

This study explores considerations for determining an effective design for a braille primer in any language. It focuses on four aspects of braille primer design: the effect of the instructional context on overall decisions, the creation and order of presentation of the orthographic code, the treatment of illustrations, and the usage of space and other printing concerns.

The method of obtaining information on the current practices of braille primer designers was a survey questionnaire sent to 100 international braille educators. Survey results were analyzed by percentages and then compared with information found in the literature.

Results suggest that instructional context greatly influences the overall primer design. A moderate number of contractions are recommended for new braille codes. Contractions are usually taught after full-spelling. Illustrations are most often represented by tactile pictures with verbal captions. Key determinants in layout are age of students and the program's economy.

Anderson, Ronald J. 1990. Stories of change: The Asheninca Campa of Peru. Ph.D. dissertation, Stanford University. 280 pages. (Available from UMI, order # 91-08779).

Ronald Anderson, an SIL member, works as coeditor of Notes on Literacy and teaches the Principles of Literacy course at TXSIL, Dallas.

The Asheninca Campa Indians, who number 20,000, inhabit the Amazon jungle of east-central Peru. They confront change from two perspectives--the individual and the sociohistorical. The study

examines Campa socialization through data drawn from audio-taped interviews, fieldnotes of observations, and a compilation of myths. Adults tell how they recall the experiences, processes, and myths that were keys to their socialization.

For the Campa, all learning is situated in a complex blend of history, beliefs, motives, practices, and persons. They are born into an ecological, cultural, and historical context that limits what can be learned and influences the value of learning particular skills or knowledge. The motivation and the activity of socialization occur within these contexts. They cite anticipation of future physical need, the desire for social acceptance, and creative identity formation as motives for learning. Campas use diverse strategies to learn valued skills. Children learn some skills in a guided manner, similar to apprenticeship, in which an adult consciously aids the child. They learn other skills in a nonguided manner, in which a child organizes the learning activities, which take the form of dramatic play, solitary experimentation, and collaborative learning with peers. The Campa teach their children of their spirit world and cite beliefs about witchcraft as explanations for why children must avoid social contact with other children. To enhance many skills, adults give learners the magical *ivenqui* plant.

As with learning traditional Campa culture, the learning of a new culture is situated in its own complex blend of history, beliefs, motives, practices, and persons. Increasing contact with Spanish-speakers and increasing dependence on the market economy prompted the Campa to give more value to learning Spanish, to organize into villages to protect their claims to the land, and to give their children a school education to aid in their economic competitiveness and to remove the stigma of primitiveness. Each child goes to school with a unique blend of goals, family support, temperament, and prior knowledge.

Kelley, Patricia M. 1988. Issues for literacy materials development in a monolingual Amazonian culture: The Waodani of Ecuador. M.A. thesis, University of British Columbia. 173 pages. (Available from the editor, *Notes on Literacy*).

Patricia Kelley is an SIL member working as a literacy specialist with the Waorani language program, Ecuador branch.

The purpose of this study was to describe and analyze literacy materials development in the recently written language of the monolingual Waodani in Ecuador's Amazonia. This group of approximately 750 members was characterized by physical and linguistic isolation until the late 1950s. Since that time, many of them have become literate in their own language and are also learning Spanish. (One hundred percent of the people still speak Waodani.) The researcher was the developer of the materials used by Waodani literacy instructors and students. This endeavour was not a part of a national mass literacy program.

The description and analysis were guided by three questions:

1. What was the context of the materials development?
2. What changes were made in the materials during their development?
3. What questions and issues concerning literacy materials development emerge from an examination of the changes and reasons for changes?

The study sketched briefly the cultural context and then examined in detail the various drafts of materials developed from 1972-1982. Content, sequence and format changes that occurred in the materials from their early drafts to their present form were examined in terms of the linguistic, pedagogical, cultural and other reasons for those changes.

The analysis identified various issues for literacy materials development among small and isolated groups. These issues in the Waodani case concerned the interaction among materials development participants within a specific cultural context using a particular literacy model. The questions that were raised about the *context*,

model and *participants* go beyond this case and its language specific materials to literacy development among other small and monolingual groups. Although the study was not intended as prescriptive, its findings and issues may be used by developers of materials in similar settings in order to clarify what is meant by literacy materials development in their particular context.

Whisler, Jacqueline Lee. 1986. A dialogue journal as a means to encouraging a bilingual student to write cohesively. M.A. thesis substitute, University of Texas at Arlington. 109 pages. (Available from the editor, *Notes on Literacy*).

Jacqueline Whisler is an SIL member working as a linguistics and translation specialist with the Weda-Sawai language program, Indonesia branch.

The social context in which language is learned is currently the focus of many educational researchers. The teaching of reading and writing has become so particularized (skills dissected and taught separately) and decontextualized (skills taught as drills without the context of the paragraph) that students often fail to learn to use the skills in their entirety. Therefore, new methods emphasize putting reading and writing back into the larger context (e.g., Graves 1983, Allen 1982, Braun and Froese 1978, Hall 1979). Students need to see that their reading and writing has a real life purpose and function. This functional approach to reading and writing is based on the current assumption that oral and written language are both learned naturally when used to communicate meaning in different settings.

With the influx of students from various backgrounds to American schools, teachers are increasingly challenged to find successful ways to teach students whose language and cultural backgrounds differ greatly from other students. These students have a very difficult time developing literacy skills to levels that meet national standards. They are taught to read and write in both a different language and a different social context and therefore need even more emphasis on function in their instruction.

This paper exemplifies one way in which the emphasis on function helped a particular bilingual student write more clearly. Through what is termed a 'dialogue journal,' a Spanish-speaking bilingual student applied his writing skills to communicate to a particular audience for a particular purpose.

Stringer, Mary D. 1983. Cognitive development and literacy in Papua New Guinea: A study of the appropriateness of the Gudschinsky Method for teaching young children to read. M.A. thesis, Macquarie University. 360 pages.

Mary Stringer is an SIL member working as a literacy specialist, Papua New Guinea branch. She is co-author of the book Working Together for Literacy, which was reviewed in NOL volume 17.4.

Vernacular literacy for 7-8-year-old children in Papua New Guinea has recently become a vital issue in educational planning in a number of provinces of that country. This investigation assessed the viability of using a particular adult literacy reading method, namely, the Gudschinsky Method, with young children. Traditional learning styles in Papua New Guinea were studied and an attempt was made to relate some of the conclusions to the reading method. Some cognitive factors were assessed with tests before and after the reading program and these findings were also related to the reading method.

The results did not show differences at a statistically significant level among the three groups of children. However, there was a trend in the predicted direction, with children exposed to a specific method-oriented pre-reading treatment achieving more competence in reading than the other children in the study. This was particularly marked for lower-achieving subjects.

Some proposals for adapting the adult materials for young children are offered and observations of the teaching/learning situation are used to make a number of suggestions for further research. These include possible refinement of the Gudschinsky Method materials with

concentration on a single teaching strategy, and research into using a structured *language-experience* approach to better utilize the traditional learning and teaching styles of Papua New Guinea people.

Wares, Iris Mills. 1965. Linguistic and related problems in Mexican Indian literacy. M.A. thesis, University of Texas. 144 pages. (Available from the editor, *Notes on Literacy*).

> *Iris (Mills) Wares has been a member of SIL since 1946. Her experience includes teaching remedial reading, high school English, English as a Second Language, and introductory linguistics. Her more than 20 years in Indian literacy include village work (both in Mexico and two years in Bolivia), resident literacy consultant in Mexico City, and literacy advisor to the Mexican National Education Committee during the planning of a national bilingual education program. Technically, her work spanned primer construction from the use of gelatin pads to mimeographs, spirit duplicators, and early offset presses. Her publications (all done with SIL and Indian colleagues) include primers in four languages, three workbooks, one prereading book, and three books in simple Spanish.*

Mexican Indian literacy programs designed to teach the mechanics of reading are complicated by linguistic diversity, varying political philosophies, and cultural differences. Traditionally, any program to teach monolingual indigenes to read first in their own language, then in Spanish was called *alfabetización*, while programs to teach these people to speak Spanish was called *castellanización*. In Mexican society, individuals with mixed foreign and Indian blood are called *mestizos* or *ladinos*. Those of pure Indian blood are called *indios* or *indígenas*. There are approximately three million Indians in Mexico speaking scores of mutually unintelligible languages which are grouped into ten language families each identifiable by its general structure.

Mexican Indian education predates the Spanish conquest. Altruistic Europeans fostered Indian education from about 1520 to

1650. This era was followed by political and economic philosophies which obliterated Indian education for nearly two centuries. By the mid 1930s Mexico was politically stabilized sufficiently to recognize again the needs of its indigenous masses and the stage was set for the introduction and development of the work of the Summer Institute of Linguistics.

Hampton, Roberta Smith. 1981. Transition programs from vernacular to English in Ghana. M.A. substitute thesis, University of Texas at Arlington. 54 pages. (Available from the editor, *Notes on Literacy*).

Roberta Hampton is an SIL member working as a literacy consultant for the Ghana Institute of Linguistics, Literacy and Bible Translation.

This paper will consider certain programs, carried out in north Ghana under the auspices of the former Institute of Linguistics, now the Ghana Institute of Linguistics, Literacy and Bible Translation, concerned with adult literacy. Specifically these are programs which have been started to enable speakers of vernacular languages to make a transition into English. The practical materials which have been used will be presented so that others may benefit and use these as a basis for preparing transition programs.

Political, social, geographic, and economic factors influence the types of programs which have been developed. These aspects will be considered in Section I.

Transition programs which have been started in five literacy programs will be surveyed and the methods by which transition was planned will be analyzed. Only two of the five programs have been in operation long enough to complete the goals established. The curricula of the various programs in progress are presented in Section II.

Research into the theories of second language acquisition will be presented in Section III and related to the programs discussed in the previous section.

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Kindell, Gloria Elaine. 1982. Discourse Strategies in Kaingáng literacy materials. Ph.D. dissertation, Georgetown University. 299 pages. (Available from UMI, order # 83-13722).

Gloria Kindell is an SIL member working on Project '95 modules in sociolinguistics, San Pablo, California.

Throughout the history of reading research considerable emphasis has been given to the suitability of texts for initial literacy instruction and early reading. When literacy materials are developed for a preliterate or newly literate society, principles of readability applicable in highly literate societies are frequently used in the production of graded reading texts. In an effort to identify the features that members of one newly literate society consider appropriate for graded reading texts designed for children's literacy instruction, two sets of primers in the Kaingáng Indian language of Brazil were examined from several discourse related perspectives, including speech event analysis, schema theory, and differences between oral and written styles. Reading texts in the first materials, prepared in a monolingual, preliterate situation, were largely dictated to the author by an elderly native speaker of Kaingáng. The second set of materials was written by a group of young Kaingáng bilingual school monitors in 1976. These monitors, with minimal education or teacher training, intuitively produced graded reading texts which reflect sophisticated current theories of reading comprehension. Readability through correspondence of reader expectations and the information on the printed page is provided through contextualization of episodes around a family theme, topic familiarity, and realism of narrated activities and plot development. Provision for decoding the written text includes the incorporation of key spoken discourse strategies, such as repetition and afterthoughts, into the written texts, close sound-symbol correlation, and orthographic chunking of meaningful units for optimal perception, retention and processing. Along with the description of various discourse strategies employed in the Kaingáng language, this study demonstrates that, with a minimum of facilitative help, individuals from preliterate or newly literate societies can devise

excellent methods of meeting the educational needs of their own people.

Brussow, Myrtle Ruth. 1987. Can the illiteracy handicap be overcome while teaching English to adult pre-beginners? M.A. thesis, William Carey International University. 135 pages. (Available from the editor, *Notes on Literacy*).

Mickey Brussow worked for 9 years as an elementary school teacher in California, Bolivia, and Colombia. She served as an SIL literacy specialist in Colombia for 10 years, specializing in adult literacy and literature development. She recently returned from southern Spain, where she taught English as a Foreign Language for a year. She is currently the administrative assistant for the SIL Vice-president of Academic Affairs, Dallas.

In order to progress in ESL entry programs and to effectively function in literate America, adult beginning-level students of English as a Second Language (ESL) must learn to read or they will encounter serious problems. An understanding of the reading process and the adaptation of effective first-language reading methods will help solve these problems in the classroom.

Becoming literate while learning English is possible by emphasizing the comprehension of whole language segments rather than initially stressing incomprehensible sounds and symbol correlations. Through presenting key written words simultaneously with oral language and evoking response to print even before production of the language, the basis for language analysis and decoding is established.

A survey of teacher opinion and actual ESL practice in central California gives indication of little emphasis on either beginning reading or a whole language approach to it for adults. Sample lessons demonstrate the possibility of such implementation.

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Thomas, Susan E. Woods. 1989. Myers-Briggs Type Indicator and performance in descriptive linguistics. M.A. thesis, University of Texas at Arlington. 287 pages. (Available from the editor, *Notes on Literacy*).

Susan Thomas is an SIL member working as a literacy specialist with the Eurasia Language Group.

This study provides a description of the personality type, preferences, and combinations of preferences as reported by the Myers-Briggs Type Indicator (MBTI), of the student, faculty, literacy specialists, administrative staff, and total population at the Texas Summer Institute of Linguistics (SIL).

Second, by comparing the SIL students, faculty, and staff to appropriate similar populations using MBTI preferences and statistical analysis, the profile of the Texas SIL groups is refined. The subgroups of SIL are also compared to the larger SIL population to determine any characteristics which are unique to the various subgroups at SIL.

Finally, each of the eight preferences of the students is compared for significant statistical correlation to Graduate Record Exam scores, present Grade Point Average (GPA), past GPA, and to final course grades in the linguistic classes of phonology, phonetics, grammar, and field methods. The academic aptitude and achievement of each type is also compared.

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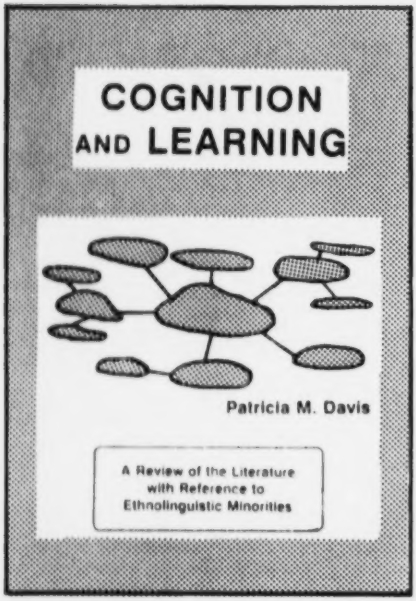

Cognition and Learning:
A Review of the Literature with Reference to Ethnolinguistic Minorities

Patricia M. Davis

This volume is a review of the published literature dealing with cognition and learning, especially in relation to ethnolinguistic minorities. Although the bibliographical references cannot claim to be exhaustive, the book does bring together under one cover information which heretofore has been scattered through many books and journals.

The three chapters treat areas of knowledge important in the field of education: developmental theories, information-processing theories, and learning styles with regard to the holistic learner. The focus is on application of theory to cross-cultural education, and a number of helps and suggestions are included for teachers. A longitudinal study, the paper traces the history of learning theories and evaluates them in the light of later developments, providing insight and balance for novices in the field.

The author worked in Peru, South America, from 1964 to 1984 under the auspices of the Summer Institute of Linguistics and in cooperation with the Peruvian Ministry of Education. Her work entailed planning, teacher training, and textbook preparation for bilingual school programs among ethnolinguistic groups of Peruvian Amazonia, and in the later years she served as an advisor to literacy and bilingual education projects. She has authored a number of articles on topics related to education in minority societies and is co-author and co-editor of the book *Bilingual Education: An Experience in Peruvian Amazonia.*

1991 x, 90 pages *ISBN 0-88312-100-X* *(paper) $6.00*

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SUMMER INSTITUTE OF LINGUISTICS
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DALLAS, TEXAS 75236

NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 W. Camp Wisdom Rd.
Dallas, Texas 75236
U.S.A.

Notes for contributors: Readers are invited to submit letters of comment and publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 W. Camp Wisdom Rd., Dallas, TX 75236.

Computer media: Contributors are encouraged to submit copies of their manuscripts on computer media (MS-DOS or MAC format) along with a paper copy of the manuscript.

ISSN 0737-6707

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WHAT IS THE MULTI-STRATEGY METHOD?

Mary Stringer

Mary Stringer completed the Waffa language program (Morobe Province, Papua New Guinea) in 1979, after overseeing an extensive literacy program. In 1983, she earned an M.A. degree from Macquarie University, Sydney, Australia. After teaching literacy courses at SPSIL Australia in 1984, she coordinated a 2-year program as a research officer with the Educational Research Unit of the University of Papua New Guinea. She is currently enrolled in a Ph.D. program in the School of Education, Griffith University, Brisbane, Australia.

This article was prepared for presentation at the Literacy Consultants Seminar in Dallas, June 1991.

1. INTRODUCTION

WRITING! An interesting topic. Can you write? In asking that question I am not focusing on form. We all know how to write! But what about writing our thoughts in a creative, interesting way so that others will want to read what we have written. Are we all writers? You will probably agree with me that many of us do have trouble writing down our thoughts coherently and clearly. Recently, in Tumam Village in Papua New Guinea, I was helping to teach an on-going class of new literate adults. A woman came to me and said that she could read but her hand would not write and her thinking would not write.

One pertinent factor in formulating the Multi-Strategy Method was the realization that the people being taught in our literacy classes were able to read and, with practice, could gain in fluency but they could not write down their 'thinking'.

2. THE MULTI-STRATEGY METHOD: WHY?

2.1. Historical perspective

In the early 1960s, when Joyce Hotz and I started work in the Waffa language in Papua New Guinea, I made up a primer using the format of one key picture and one key word using a key consonant or vowel. As soon as the vowels were introduced, each consonant was taught with the five vowels on one page. Each page had words using

some of the five syllables, but sentences were not introduced until the last page of the first primer. We soon learned that this presentation was inadequate, but by using two sight words on the first pages of the primer, we added sentences on each page and developed a series of five primers. Many learned to read using this series, but on-going classes were needed for students to learn to read fluently with comprehension. Writing was also taught, but few learned to write confidently so that their writing could be understood.

Then the Gudschinsky Method came to Papua New Guinea. Many teams used it successfully and gained help from the sound principles on which it was based. In the early 1980s, I did a detailed study in Waffa using the Gudschinsky Method in teaching young children to read and write (Stringer 1983). This study led to some in-depth research on cultural learning styles (Stringer 1983, 1984). Note one of my final comments in the assessment (1983:220):

> Research into the viability of using a more structured "language-experience" approach which meets some of the demands of cultural learning styles in Papua New Guinea would be needed if teaching by wholes were considered a suitable approach.

At that time there was no thought in my mind to pursue a holistic approach, but in late 1984 the Australian Reading Association invited Donald Graves to speak at their conference in Melbourne. At the same time, during the South Pacific SIL, where I was helping teach, many of us were seeking to come to grips with the theories behind the reading and writing processes and the practical outworking of such theories.

2.2 Theoretical orientation

At the conference, I discovered that there were people not only talking about process writing (Graves 1983) but they were also introducing the concept of process reading modeled along the same lines as process writing. My questions were numerous because I could not see how anyone could read and write stories from the first day of literacy instruction. Gradually, a pattern began to form and I caught a glimpse of the principles underlying the concept of teaching by wholes.

And yet, to me, there were three obvious reasons why such an approach would not work in the different cultural settings found in Papua New Guinea: (1) There was virtually no print in the various languages from which to set up a print environment in the classroom, (2) it was necessary to recruit men and women with no previous training and to instruct them in the teaching patterns, and (3) such teachers trained for short periods needed a structured approach.

It became obvious from our reading and discussions at the SPSIL literacy course that there were two major practical applications of the theoretical orientations behind the reading process, which, for convenience, I will call *bottom-up* and *top-down*. It also became obvious to me that a grasp of the basic principles of each approach were needed for a person to become a fluent reader.

A comprehensive study of Frank Smith and Kenneth Goodman's writings had given many students a bias toward a whole language approach to reading and writing instruction. Samuels and Kamil (1984:187) comment on Goodman's model, ". . . it is accurate to assert that his model always prefers the cognitive economy of reliance on well-developed linguistic (syntactic and semantic) rather than graphic information.". Of Frank Smith's work they say:

> It is not so much a model of reading as it is a description of the linguistic and cognitive processes that any decent model of reading will need to take into account. . . . Perhaps the greatest contribution of Smith's work is to explain how the redundancy inherent at all levels of language (letter features, within letters, within words, within sentences, within discourse) . . . provide the reader with enormous flexibility in marshaling resources to create a meaning to the text.

In seeking to find a practical model for instruction in literacy in preliterate societies using the Smith-Goodman orientation, the question I persisted in asking of whole language teachers was, "But how do you teach word attack skills?" At this stage there seemed to be no clear answer in the minds of the practitioners. This was not surprising ". . . because Whole Language is not, as many believe, an instructional approach to the teaching of literacy but rather a set of beliefs about language, a philosophical approach which draws on a variety of disciplines. . ." (Bouffler 199[illegible])

The clearest answer to my question came from Lewis Larking, a lecturer at the Institute of Education, Rockhampton, Australia. This was more than a year after I had set up prep-schools in the Enga Province of Papua New Guinea. Larking used Don Holdaway's Model of Balancing Approaches and Materials (Holdaway 1979) to explain the *whole language* approach, but when I asked the inevitable question, he said that word attack skills were picked up by students, mostly through the writing process.

In my quest for further enlightenment I looked at the comments by Samuels and Kamil (1984) on the information processing perspective in the reading process. After commenting on Gough's model, they state:

> The appearance of LaBerge and Samuels's (1974) model emphasizing automaticity of component processes and Rumelhart's interactive model (1977) emphasizing flexible processing and multiple information sources, depending upon contextual circumstances, provided convincing evidence that the information processing perspective was here to stay within the reading field.

The study of these and other models seemed to show an agreement that all levels of language are involved in the reading process, but contention is based on the degree of focus in any one area. To those of us who are engaged in literacy instruction, the practical issue is not on the necessity of grapho-phonemes, syntax and meaning for the reading process, but on where and how to begin to break the code into literacy.

Roger Shuy (1977) states, "It is my position, in fact, that learning to read involves both the mundane behavior skills stressed by traditional reading programs and the cognitive processes argued for by Goodman and Smith." This led me to the model I have developed for the Papua New Guinea context. Shuy's model is linear, with progress through the stages of reading--from letter-sound correspondence to pragmatic context.

I argued that if both *behavior skills* and *cognitive processes* were necessary, why not start with both at the onset of reading? Why not call on the instructional methods of the whole language approach for

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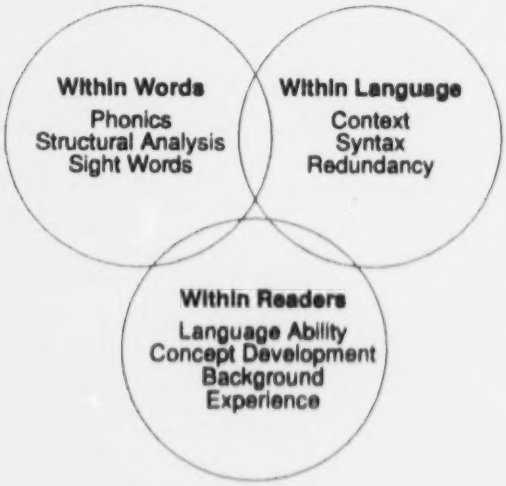
the linguistic and pragmatic contexts, and the more traditional methods of instruction for the letter-sound correspondence?

Cambourne (1979:83) states, "the point is that there are distinctly different theoretical approaches to the reading process which lead to quite different teaching strategies and instructional materials." Teaching strategies and materials for breaking into literacy through a more holistic approach are different from those used for an approach that focuses on the elements below the word level. The model that shows most clearly the division into two tracks of the Multi-Strategy Method is the model showing major cue systems used in reading (Smith, Goodman and Meredith 1976)

Figure 1: Major Cue Systems Used in Reading



In this model, integration takes place between cues found within words, within language, and within readers. For instructional purposes, it seemed logical to separate learning of the elements below the word level from learning the cognitive processes of reading found in higher levels because of the different instructional techniques and materials needed. Given the constraints of low educational standards and the need for teacher training, this division into two separate tracks fits the socio-cultural context in which we have to work in many developing countries.

2.3. The sociocultural context

I sought to develop a method with consideration of pragmatic, sociological and psychological influences experienced in the cultural context. For pragmatic reasons, it was necessary to formulate strategies that:

1. Could be presented in short, group oriented training courses for teachers.
2. Teachers could handle innovatively after understanding the basic principles.
3. Fit into a simple, straight-forward structure.
4. Require a minimum of daily preparation and making of aids such as books, charts, and flash cards on which each lesson would depend.

In the sociological area, the method needed to allow:

1. Teachers to have status and responsibility in their respective areas.
2. Teachers to work together without competing.
3. Group participation and peer teaching and learning.

In the psychological area:

1. Teachers needed to be confident in their respective areas of responsibility.
2. Students needed an opportunity to be in charge of their own learning for a positive introduction to literacy to be generated.

In an attempt to make a literacy program culturally appropriate and acceptable, I developed a two track model (Stringer 1988) with both tracks involving all levels of the reading and writing processes, but with separate and distinctive emphases. One emphasis was holistic, meaningful learning with understanding of how to listen, think, talk, read, and write for meaning. The other emphasis was analytic step-by-step learning of syllables and letters in a context of learning to know, build, read, and write the form. Teachers were given training in both areas, but each person specialized and became the teacher for one track, according to his or her preferred teaching and learning style. The dichotomy of holistic-analytic fits the cognitive learning styles of Field Independent-Field Dependent thinking (Davis 1991).

3. MULTI-STRATEGY METHOD: HOW?

3.1. A trial

In 1985-86, I tested this approach of incorporating multiple strategies within two separate patterns of instructional procedure in the Enga Province of Papua New Guinea (Stringer 1985, 1987a, 1990). In this trial, students were divided into two groups and taught concurrently by two different teachers, each trained to teach from a particular perspective. One taught from whole, meaningful units of prose, and the other taught from specific elements within words. I called the first approach *Reading to Write*, with more emphasis placed on natural, expressive, meaningful reading and writing. I called the second approach *Writing to Read*, where spelling and accurate reading and writing of the smaller elements were in focus. The students changed classrooms to be exposed to instruction from each teacher for one hour each morning.

For comparative purposes, two schools were exposed only to the *Writing to Read* approach, one school to the *Reading to Write* approach, and two schools to both approaches. The highlight of this initial trial was the individual, spontaneous creative writing produced by children exposed to both approaches. The children were uninhibited and put their thoughts into print with confidence, at first with inaccurate form, but with growing accuracy as they integrated the skills learned in the *Writing to Read* period of instruction. Each student proceeded at his or her own pace, was in control of the learning process, and grasped the procedures as he or she was cognitively ready.

3.2. The model

The success of this trial (Stringer 1987b), prompted the writing of *Working Together for Literacy* (Stringer and Faraclas 1987). The book is a guide, written to help second language speakers of English to grasp the basic elements and set up a literacy program in their own languages, from an initial survey, through teacher training, and on to on-going classes for fluent readers and creative writers. The method was refined to clearly describe all the basic elements needed in a successful literacy program(Figure 2).

Figure 2: The Two-track Model of the Multi-Strategy Method

Processes of Reading and Writing

STORY TRACK	WORKBOOK TRACK
Emphasis on Holistic Creativity with Meaning and Comprehension	Emphasis on Analytic Skills and Accuracy of Form
Student Centered Content Control	Teacher Centered Content Control
Acquired by Practicing Creative Acts	Learned by Practicing Discrete Skills

Self Integration

Fluent Readers and Writers

In the Story Track, the role of the teacher is to set the stage and give the students plenty of opportunity to interact with print, to create a print environment in which students can learn to express themselves in creative language and acquire the process of how to read and write by participating in meaningful reading and writing. The role of the student is to think, understand and create, always with the emphasis on meaning and comprehension. The teacher chooses the cultural theme for the week (a picturable item: people, animals or objects) and relevant story books. However, students' participation determines the content of the lessons. They participate in an *Experience* (an emotive, story-generating activity about the cultural theme), generate the story for the *Wall Chart*, *Listen to* and discuss *a Story*, choose a story to read for *Reading Alone*, read the *Shared Book* with the teacher, and *Write* a creative story on the theme.

In the Workbook Track the role of the teacher is to teach particular skills perceived to be necessary for learning to read and write. The role of the student is to use his or her eyes, ears, and hands to perfect each skill with emphasis on accuracy of form. The teacher structures each lesson and controls the content so students can learn discrete skills step-by-step. The students learn how to recognize syllables through *Analysis and Synthesis of Words*, how to recognize words in *Sentences* and how to *Write* by forming letters and spelling correctly. All the instructional material is culturally appropriate and meaningful, but more emphasis is on form than on meaning.

The terms *reading acquisition* and *reading learning* come from Sheridan (1986:500-501) who states that people use reading acquisition "to satisfy inner needs to understand meaning" and thereby teach themselves about reading. In contrast, "reading learning is usually taught to us and focuses more on form (sound-symbol relationships, decoding, correct pronunciation) and less on meaning."

In each track there is ample latitude for the interdependent and interactive aspects of the systems of language, that is, semantics, syntax, and graphophonics, to take place in the mind of each individual student, but the degree of emphasis in each area is different. In the Story Track, more emphasis is placed on the meaning and structure, while in the Workbook Track graphophonics and spelling are emphasized. The simplicity of the model lies in that the student is in control of acquiring and learning in natural contexts and the teacher is not expected to weave together the different aspects in contrived settings to facilitate learning.

4. HIGHLIGHTS FROM PRACTICAL APPLICATIONS

4.1. Vernacular prep-schools for children

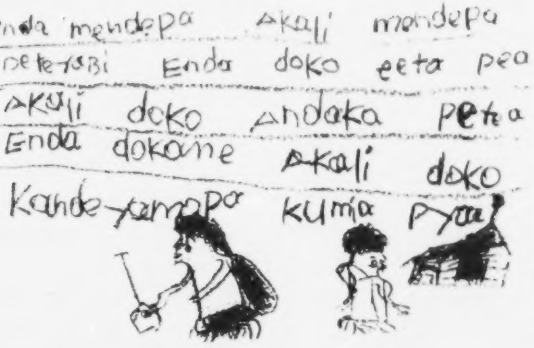
In the prep-school program in the Enga Province (Stringer 1987b, 1990) the enthusiasm of teachers, children and parents was significant. After a three-week writers' workshop to prepare materials, teachers were trained in method for three weeks where they chose the approach they preferred to use. In schools where both approaches were taught, the two teachers cooperated well, taking control of both classes when one, or the other, was absent. Each teacher had a separate classroom where he or she was in control and responsible for half the students in a full curriculum each morning. Parents cooperated by looking after the school and the grounds each week, as well as taking time to teach in the weekly culture session. The children were particularly enthusiastic about the holistic approach. In one school, in the early stages of the program, some children tried surreptitiously many times to leave their workbook classroom and join the other group after the roll had been called.

The most outstanding feature of the Enga program was the advances made in writing creatively. By the end of the year, some children were writing stories of up to thirty words, with few errors, in

a 15 minute period. In most instances, poor spelling occurred where the orthography was inadequate. In one school, a number of children could write with more accuracy than they could read. Figures 3 and 4 give examples of writing achievement at approximately 22 and 30 weeks respectively.

Figure 3: Writing example at 22 weeks: responding to a capital letter, word breaks, and good spelling

Figure 4: Writing example at 30 weeks: more motor control and correct spelling



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At this stage, crayons and chalk were still used for writing, due to a lack of pencils. In the Grade 1 Experimental class, children wrote long, creative stories and make their own books.

4.2. Adult Literacy Classes

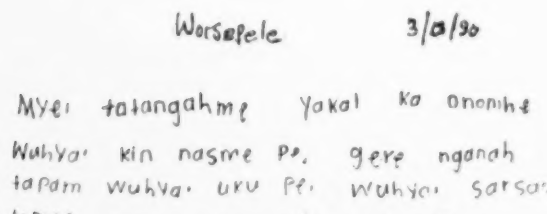
In 1990, an adult literacy program was set up in four villages in the Urat language in Papua New Guinea. Teachers were trained and materials prepared in a four week workshop. After a pre-test to determine the degree of literacy contact of the students, classes began with two teachers per school, except for one experimental school where one teacher taught both tracks. Classes were held for 25 weeks, five days a week, with one week off after four weeks of teaching.

Sociological factors hampered classes in two villages. These had little community support, teachers came from outside villages, and classes were crowded in a single classroom where the teachers taught consecutively. The classes in the other two villages made very good progress, with regular attendance and continued enthusiasm, especially in the village that had two classrooms and two teachers, each teaching separate tracks.

In this latter village, thirty three students completed the program. Thirteen had been exposed previously to some literacy in the lingua franca or English for short periods. This group became quite fluent and confident readers and writers. Of the preliterate group, twelve achieved literacy and are perfecting their skills in on-going classes, while the remainders were hampered by problems like old-age.

As in the Enga program, the highlight of the Urat program was the spontaneous, self-generated story writing. The language is complex phonologically with a number of morphophonemic changes. These complexities hampered both reading and writing. The literacy program prompted orthography changes to facilitate literacy in Urat.

Figure 5: Example of writing by Worsepele after 25 weeks[1]


Worsepele 3/8/90
Mye tatangahme yakal ka onomihe
Wuhya kin nasme pe. gere nganah
tapam wuhya uru pe. wuhya sarsa-
tepo'e sen nate gah tihei pe.
ngumbiwat. ngonomih- pe ki nule pe,
yai kin nambai nenge nal nioi kin
pe tuwei wesekeh me kin

4.3. Pertinent Factors for Multi-Strategy Method (M-SM) Literacy

Some important literacy principles have been reemphasized and new insights gained as a result of the practical application of my ideas. One important insight is that national teachers, after limited training, can grasp the underlying principles, make them their own with innovative teaching techniques, and bring people through to literacy. Below are some comments related to adult literacy using M-SM:

1. The division into two tracks is important. This dichotomy fits the Field Dependent-Field Independent cognitive learning style division. Much of the literature on holistic and analytic learning styles and education, particularly holistic instruction is relevant (Davis 1991). The M-SM caters to both types of students by

[1]Translation of Worsepele's story:

The man pulled the bow ready to shoot the flying fox. He let it go and (the arrow) stuck up that flying fox's stomach. And then the flying fox lost its grip and came down with the arrow to the bottom of the tree. The dog killed (the flying fox) and it died and then the father (of the dog) picked it up and took it to his village and his wife cooked it for him.

separating the material and style of teaching. Teachers choose the style that is most natural to them, and there is no burden on each teacher to cultivate and bring both teaching styles into focus in the classroom. Students have the opportunity to draw on the learning style that fits them best and, at the same time, learn to understand and develop the other style. In the Urat program, there was noticeable confusion where both tracks were taught by one teacher. The separation helps teachers and students to know what is expected of them, and they can tackle each session without confusion.

2. Students with preferred holistic learning styles tend to pursue one thought, action, or investigation through to completion. Therefore, in the Story Track, it is important for teachers to encourage students to be predictive, creative, and self-generating in each lesson. Meaning must take precedence. Practically, this means that teachers should foster creativity and not allow students to mimic someone else when reading, not allow students to copy when writing, not tell students what to write, and not correct spelling and reading mistakes.

   Sheridan (1986:501) reiterates this point by saying, "Perhaps the greatest mistake a teacher can make is to interrupt reading *acquisition* with reading *learning*. It is important to remember that during reading *acquisition* the reader is focusing on *meaning* (i.e., is reading for meaning)."

   Insisting on creative writing without focusing on spelling from the outset is more difficult to achieve with adults than with children. In the Urat program, there was more creative spontaneity and accuracy in story writing in the class where the Story Track teacher did not allow copying than in any of the other classes.

3. When teaching elements below the word level, different thinking patterns and instructional techniques are in focus. Allowing students to grasp the requirements for spelling and attacking new words in an atmosphere where creativity is not demanded gives room for individual control in using this knowledge when creative writing and reading take place.

4. It is important that teachers understand the purpose for each lesson, and to make sure that students get the point. Presenting

one thing after another without a set purpose brings confusion. In the M-SM each particular lesson in each track builds into achieving one overall purpose. The method is planned so that there is no mixing of authority in performance of tasks, and teachers and students know where they are and what is expected of them. In the Urat program, teachers were quite explicit in informing the class of tasks and relationships.

5. CONCLUSION

Initial attempts to make literacy relevant and easy to achieve led to deeper study of literacy methods, traditional learning styles of the people of Papua New Guinea, the socio-cultural context, and reading theory and practice. This study led to experimentation using a dual approach to teaching literacy. The method was refined and presented as the Multi-Strategy Method.

At present, this two-track model is being used in many areas of Papua New Guinea with some variation in the patterns of the Workbook Track. Literacy workers who had material prepared for teaching a basic syllable approach are using these materials alongside the Story Track. Courses using the book *Working Together for Literacy* are being taught in the Capital and various centers around the country by the University of Papua New Guinea and the National Department of Education. After basic training in the model, nationals are setting up their own teacher training courses and literacy programs.

There are success stories. One national literacy worker, teaching in the lingua franca, said that his courses used to be for two years, but with the new approach, students are learning to read and write so quickly that the teachers do not know what to teach in the second year. We are encouraged in Papua New Guinea by people asking for training in many parts of the country as vernacular literacy has become valued in many societies. The National Policy of Education has also changed in favor of vernacular education in some form on all levels with children, out-of-school youth and adults.

The Multi-Strategy Method is one of a number of models being used for literacy instruction in this upsurge of interest in vernacular education in Papua New Guinea. Whether it will prove to be a model that indigenous people can grasp, make their own, and use with

success in different linguistic and cultural environments in other countries will need further research.

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IS THERE ONE BEST PRIMER/PROGRAM DESIGN? YOU BET! THE ONE THAT IS DESIGNED TO FIT YOUR PROGRAM.

Glenys Waters

Glenys Waters and her husband Bruce joined SIL in 1975. They worked for eleven years in the Djinang language program in Australia, and are currently assigned to the Papua New Guinea Branch as advisors to the Takia Translation Project. Glenys has been involved in designing literacy materials and programs in both branches and in consulting, teaching, and administrative roles in the literacy departments.

This article was prepared for presentation at the Literacy Consultants Seminar in Dallas, June 1991.

Over the years, literacy consultants have tried to come up with one way of doing literacy. (Some have even strived to come up with *the* way.) Often we have tried to come up with a *recipe* for literacy work where field workers just add *their* language and stir, and out comes the necessary mixture for a *successful* program. For many years we had the Sarah Gudschinsky recipe, *A Manual of Literacy for Preliterate Peoples*, as a cook book to follow. Other cook books have been designed by Freire, Laubach, Ernie Lee, and in 1987, Mary Stringer and Nicholas Faraclas.

Others doing literacy differently often get asked for their *recipe*. However, some of us are reluctant to get drawn into codifying *the recipe*. Maybe we fear we will suffer the same fate Sarah did: hearing echoes of "Sarah says," and sometimes seeing others follow the recipe with far less flexibility than the original author intended.

I have been involved in several programs to varying degrees in my SIL history, and no two programs have turned out the same. I am encouraged by that because it is important in literacy to design a program to fit the situation as best we can. The best primers and the best program designs are the ones that fit the situation and the consultee, generating enthusiasm and interest. As Dorothy Thomas (1990:55) points out,

> Q.1 Why did Feire's method work so well in Brazil?
> Q.2 Why did Laubach's method work so well in the Philippines?

Q.3 Why did Gudschinsky's method work so well in Vietnam?
A.1 Because Freire was in Brazil.
A.2 Because Laubach was in the Philippines.
A.3 Because Gudschinsky was in Vietnam.

Her statement puts things into correct perspective. What people did was appropriate for their situation. For us too, the important thing should be fitting what we do to our situation.

How to do this best can be summed up by 3 headings.

1. Local factors.
2. Personnel factors.
3. Guiding principles for teaching reading.

1. LOCAL FACTORS

There are many local factors to take into account when designing a literacy program, choosing a method of teaching reading, and designing primers to fit these choices and situations. These factors will have different importance in each situation, but should always be considered. The list of factors is not exhaustive; your situation may require extra ones.

1.1. Geography of the area

In PNG, the geographical features of one area can be dramatically different from those of another, and consultants have to continually remind themselves that what they learned from their experience in one area will not necessarily apply equally to another literacy program. There are highland, lowland, and island allocations all of which vary markedly in their accessibility. These factors affect what can be done in literacy and how it should be done. One team, Daniel and Wei Lei Jesudasen, in a remote mountainous area chose a method that requires minimal teacher training and minimal supervision because of the extremely difficult terrain (Jesudasen 1990).

1.2. Social organization

How people group themselves in residential units affects the design of primers and literacy programs. Some PNG groups live in large villages. On Karkar island where we work, villages are often of 400-600 people, the largest having 1,600. In other areas of PNG, some live near their gardens, others in small hamlets, others in small clusters of

houses scattered through the bush, and others in villages. Some areas are organized more on a *town* basis.

In East New Britain, the SIL team works with the provincial government, which oversees Tok Ples Skuls in five languages and other literacy work in the province. The primers and materials used there must be quite different from those used with the Hewa, Southern Highlands Province, where people live individually in the bush and do not live in larger groups.

It is helpful to bear in mind that the cultures with which we work generally have ways of organizing themselves to accomplish things. We should not assume from the outset that to do literacy work we need to set up additional structures. Often it is possible to work within structures that already exist and function smoothly. On Karkar, I am going to encourage the women to teach literacy skills through the women's church groups, Sunday school teachers to teach their students, motivated people within clan groups to take responsibility for teaching within their clan, pastors to practice reading together when they meet as part of their circuit duties, and so forth. Working this way, one can use already existing organizations and networks.

1.3. History

Many parts of PNG have had mission schools for up to a century, and many people are already literate. When teaching a literacy class, they tend to imitate classroom practices they are familiar with from their earlier experience. Many people learned by rote and repeated drilling. In areas where this is common, it may be good to use something like Repeated Readings as a method of teaching reading.

When the Jesudasens started teaching, they used a Whole Language approach. However, some people outside the classes complained that the teachers were not teaching properly because they were not using syllable charts. Because that was the way they had been taught, some felt that was the right way to teach reading. So the Jesudasens included syllable charts in the primers. The students often find the charts boring, and skip over them to read the interesting parts of the books, but now everyone is happy.

I have heard of problems with teachers drilling the story track of the Multi-Strategy Method. In my own experience, I have watched

painfully as teachers drill a Shared Reading Experience with a Big Book. The ideas people already have about how things should be done may require us to modify what we do.

1.4. Education level

Whatever level the people are at will determine the contents and approaches of both primers and program design. Many Takia can read because they had mission contact for 100 years. People should be able to pick up primers based on the book of Genesis and teach themselves, because many can already read in Tok Pisin or English.

The Girawa of Madang province, with a literacy rate of about 4%, need to start right at the beginning with basic instructional materials. The Hewa of West Sepik province took 6 months to learn how to interpret a picture on a page. To teach basics, such as how to hold a pencil, a prewriting booklet was added to the Hewa Genesis primers (Vollrath 1991).

Education levels of potential teachers also affect the complexity of methods chosen. If there are enough grade 10 graduates available to train as teachers and supervisors, then more complicated ways of teaching can be chosen, or one may choose combinations of methods. Where teachers have had little or no schooling, methods and materials need to be kept more basic.

If nationals are going to be designing the primers, methods of primer construction need to be easily handled by them. This is especially important because of the government *push* for Tok Ples Prep Skuls.

1.5. Local politics

Sometimes the method and program choices depend on decisions made by a Tok Ples Komiti (vernacular language committee) and on how well such committees can function. On Karkar Island, I am reluctant to get involved with Tok Ples PreSchools (TPPS) for various reasons, but I may need to do so if the Takia Buk Baibel Komiti decrees it will be so. Some literacy programs in the Madang region are not going ahead because the committees overseeing them are not functioning well. Because the programs were designed to function in a formal way under the control of the committee, this is causing

problems. How well things get done at the local level can affect literacy programs, so should be considered at the design phase.

1.6. National and regional politics

With over 850 languages within its borders, it is encouraging to see the PNG government endorse vernacular literacy!

> The language of instruction for these early years of education must be common to all agents, and must not exclude the parents as educators. Research evidence indicates that children acquire literacy more effectively when they first learn to read and write in their own languages (Ministerial Committee Report 1986:18).

Some provinces are making it a priority to commit manpower and money to training programs, TPPS, and vernacular components in community schools. Provinces enthusiastic about literacy expect help from SIL teams, and assume SIL will share the government's vision. Teams working in such areas have little choice but to work at designing the above kinds of literacy programs. The Milne Bay Province has stated in circulars to schools that where an SIL team is present, vernacular literacy will be taught in the schools.

In other provinces, governments acknowledge the national government's desire to promote vernacular literacy, but are not committing people and money to it. Thus progress in these areas is slower, and little is expected of SIL teams to support formal programs in the schools. In such areas, we are still free to pursue less costly and complicated models of literacy programs.

1.7. Economics

The amount of money people have and are willing to spend to learn to read will affect the type of method chosen. If people are willing to pay teachers, then we can plan on having formal classes and TPPS. In these situations, more complicated methods and locally trained teachers can be used, compared to situations dependent on volunteers.

Agrarian societies, especially those involved in cash cropping, are restricted in the times when they can be involved in literacy activities. The Dami decided that they would only have three terms to their school year: terms 1, 2, and 4. Third term is the season for planting

gardens, so teachers and pupils are heavily involved in these activities. Communities in the highlands of PNG never run formal courses or classes during coffee harvest season. Elsewhere some hold their literacy classes early in the morning, so people are free to work in their gardens the rest of the day. Others hold classes at night because people are busy during the day.

It is therefore important to design programs that fit in with local economic activities. This means that literacy materials need to be flexible enough to be put aside during periods when people are busy doing other things. The scheduling for formal teaching situations needs to be acceptable to the community.

1.8. Motivation

People's motivation for learning to read should affect the content of the primer or program, and maybe teaching methods too. If their motivation is to read the scriptures, then scriptures should be used in the primers. If people want to read to better their lifestyle, then topics such as health, farming, or banking information should be in the primers. If people want to learn about the world around them, then primer stories need to be about other villages, other countries, other cultures, and news items.

If learners do not see the link between the reading lessons and their personal motivation for learning to read, they often give up in frustration. The Hewa started reading classes using Gudschinsky-style primers, but they saw no relation between the classes and learning to read the book of Mark, which was what they really wanted to do. When a Whole Language approach was tried using scripture as the primer text, they could see the connection, and got excited about reading classes.

In one literacy program, the materials had to look like Bible studies or the people were not interested. Another program encouraged the use of Sunday School lessons for teaching vernacular literacy skills among the Sio people.

1.9. Who needs to become literate?

The method you choose and the kinds of primer texts you have will depend on who will use the primers: adults, teen-agers, children, or family groups.

It is also important to know if instruction is to be in classes of people the same age, in family groups, or individually with a friend. If people are going to be teaching their friends, then choose a method that most people can handle without too much trouble and training--that is, a method in which self-teaching is the dominant strategy. If you are going to give formal training, you can use more difficult methods.

In early literacy classes, the Umanikaina people worked well in mixed groups. Learners who caught on quickly helped the slower ones without shaming them because they knew the culturally appropriate ways to help in such circumstances. In other situations, adults may wish to learn separately from children because they become embarrassed by their lack of knowledge or skill in reading.

1.10. Learning styles

Every culture has its own way of passing on knowledge, information, and abilities. When my daughter Rachel was learning how to kill, clean, and gut a chicken, a national neighbor came to our house. She took the chicken, and showed Rachel how to cut its throat, put it in hot water, pull the feathers, etc. She demonstrated, rather than tell her what to do. We, being westerners, wanted to teach our daughter with words. We break tasks down into small chunks with a lot of explanation. Our children do not always observe carefully, unless we verbally focus their attention.

When I was learning to make a *miwini* (string bag) at Ramingining, the women said, "Do it like this," and then demonstrated the technique. I found it hard to learn. They went very fast and did not explain anything. It took me a long time to work out what their fingers were doing. I am sure they thought I was a bit slow. If I were teaching you to make a *miwini*, I would tell you how to hold the *miwini* while you work on it. I would tell you to hold one piece of *pandanus* in one hand and one in the other, with the two main threads coming up between them, and so on. I would slowly show you how to do it, repeating my instructions as I did, repeating several times, then have you do it, repeating my instructions again. We analyze the task, break it down into small chunks, talk about it a lot, and sometimes demonstrate it.

The children at Ramingining learn new skills by:

watching
watching
watching
imitating (copying)
copying
copying
watching
copying.

They gradually get better at doing the things they need to do. It is done in a real-life situation, not in contrived or artificial settings.

How people learn best is important when thinking about which reading methods and primer and program design to choose. We should fit what needs to be taught with the ways people teach naturally. When Yasuko Nagai (1990) worked with the Maiwala and Labe people using a Shared Book model, the learners commented that was the way they themselves like to teach. Shared Book approaches fit well in cultures that learn by approximation, observation, and imitation.

There are probably many other *key factors* pertinent to other countries. SIL has always encouraged teams to consider such factors in literacy program design, but teams often have not made choices of method and primer design with these things in mind.

2. PERSONNEL FACTORS

It is people that make literacy programs run. We need to consider the talents and skills of the people who will be involved when we recommend a program or primer design.

An important factor to consider is the amount of *time* the SIL worker is willing to invest in literacy. In PNG, the majority of literacy work is carried out by translators, so they are already carrying a huge workload, and literacy seems to be a huge additional burden. Often, full-time literacy workers are the ones who impose programs on the translators, forgetting that the translator's time is not fully devoted to literacy. Often, a translator can only afford to give literacy-related tasks a month or two out of the year. The *ideal* literacy program suggested to our workers often overwhelms them. Years can be

consumed by the literacy task--so much so that some have found it difficult to get ahead in the translation task.

Not every team is willing to invest a lifetime on the field doing literacy and translation work. Workers have kids who grow up, parents who get old, kids who need them in the home country, etc. Many acknowledge extensive literacy programs as good, but do not have the time or commitment to invest. While we might not always agree with some people's priorities, we have to live with their limitations when designing programs.

The skills people bring with them also affect what they are willing to do in literacy. Translators who are good at their jobs, Greek scholars, and linguists often are difficult to motivate to become involved in literacy. They might not feel confident to tackle the literacy task because it is not what they were trained for. The consultant help available to them on the field may be very limited and, as mentioned before, it can be given by people who have only a literacy focus. Too often help comes in the form of "Read this article on how to do it," rather than, "Can we find someone to come and help you do that?" Sometimes it is necessary to *walk* people through processes they are unsure about, helping them with the planning and implementation stages, and getting them started. Interest and enthusiasm will follow and they will become more confident and able to tackle other literacy tasks on their own.

Sometimes we need to consider the amount of time people have already invested in literacy. Some people come for help after they have already spent months designing primers that did not work, or had materials printed, but need some help to get things off the ground. Some like the *modern* approaches, but already spent a lot of time and effort developing materials in the *old* ways. Literacy workers or consultants can walk into such situations and be tempted to throw out what has been done and start again. Sometimes that is necessary, but often it is a recipe for disaster, hurt feelings, and broken relationships.

We need to concentrate on finding ways of working with what has been done already, building on it rather than causing frustration or causing people to feel that all their work has been wasted. Sometimes it is necessary to work hard at finding common ground--people are willing to add, willing to change, etc., to make the primers and

programs more acceptable. I have seen modified Gudschinsky primers with meaningful stories added to them and, at the other end of the scale, totally Whole Language primers, with all possible variations in between. Most important, the consultant and consultee must be happy with the product. The consultant wants to see certain theoretical points satisfied, and the consultee wants it to be something like his original conception. He should still feel he can say with pride, "That's my primer!" and be enthusiastic about implementing the program.

The time local people want to invest and the skills they bring to the task often affect the program design and implementation, either positively or negatively. For example, if local people are not willing to spend much time with literacy activities, then do not try to establish labor intensive programs. On the other hand, where enthusiasm is high, a lot can be accomplished by voluntary labor. Volunteers wrote all the materials for the Maiwala and Labe TPPS programs, including forty hand-made Big Books. Teaching is done three days a week on a volunteer basis. In the Umanikaina program, both teaching and supervising are done on a fully voluntary basis.

Another thing to consider is that PNG schools once used a lot of drill and rote learning, so we need to be aware when developing materials that teachers will tend to drill as they were drilled. With this in mind, I heavily reduced the drilling in primer lessons. I also need to reduce repetitive steps in the presentation of materials, as teachers are already inclined to do far too much drilling. One compensation is that the children expect endless repetition and tolerate it much better than, say, Australian school children.

3. GUIDING PRINCIPLES FOR TEACHING READING

3.1. The need for meaningful contexts

Reading is more than just sounding out letters and putting them together to make words.

> Reading is the process of constructing meaning from written texts. It is a complex skill requiring the coordination of a number of interrelated sources of information. (Anderson et al 1985:7)

Other non-phonic processes are necessary for arriving at meaning from texts, and are naturally active in all reading, even

> beginning reading. In particular, the use of context--at all levels--is a necessary non-phonics reading process. (McCormick 1990)

Therefore teaching people to read should be more than just teaching phonics or *decoding to sound* strategies. If there are processes other than phonics necessary for gaining meaning from texts, then students should be taught them, or at least given opportunities to exercise those which are naturally active. For example: if context clues are useful *at all levels* then primers *at all levels* should have a high percentage of activities drawn from and surrounded by meaningful contexts.

> . . . what makes meanings and individual words become transparent to us is context, which means the general sense in which the difficult element is embedded. Provided that what we are trying to read has the possibility of making sense to us the parts that are unfamiliar can usually be deciphered because of all the other clues available. (Smith 1978:123)

A knowledge of the schema of the text is also helpful. For example: without an understanding of *sago making* schema it is difficult to gain meaning from the Angor story *The Cockatoo and the Crow*. However, every Angor has this schema, *sago* being the main food of their area. The gaining of meaning from this passage is easy for the Angor student--the topic is known and understood, the sago making steps are familiar so readers know what to expect next, and the vocabulary used in the text is predictable. Using texts that have familiar schema is helpful in teaching the skills of reading.

3.2. Use of real language--not *primerese*

Using natural text, rather than artificial or controlled text, is helpful to new readers (Elley 1981). Their implicit knowledge of the language's patterns and of the text genre assists the new reader in predicting and decoding.

> Merely shortening words and sentences to improve readability is like holding a match under a thermometer when you want to make your house warmer. . . Indeed dividing long sentences into shorter sentences and substituting familiar words

> for less familiar words can make a text more difficult to understand. (Anderson et al 1985:63, 64)

In PNG, hundreds of languages have what are called *serial verb constructions*. These are strings of verbs with few or no nominals such as subjects and objects; the referents are understood from the context and to some extent by agreement marking on verbs. If you want text to be idiomatic, you *cannot* say:

> John bought the food.
> John took the food home.
> John gave the food to Betty.
> Betty cooked the food in a pot.
> John and Betty ate it.

It is not natural text and therefore not predictable. It does not conform to the patterns of PNG languages. In Takia it should read something like:

> Food he bought get come
> to wife give and she cook
> they eat.

Similarly, many PNG languages have a syntactic pattern called *head-tail linkage*, which is important for signaling the temporal sequence of events. So one reads sentences such as:

> John bought food at the market.
> Buying, he went home.
> Arriving, gave it to wife.
> Giving, she cooked.
> Cooking, they ate.

These distinctive linguistic features and patterns must exist in primer stories too, so students can use their linguistic knowledge to help with the reading process.

A well-structured text will contribute to comprehensibility and memory of the read text.

> The most important text characteristic for comprehension and learning is textual coherence. The more coherent the text, the more likely the reader will be able to construct a coherent cognitive model of the information in the text. (Armbruster 1984:203)

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Some people design early reading materials by severely limiting the vocabulary used, thinking this will make it easier for the beginning reader. However, this is not always helpful. The "considerate text" can make processing more difficult. The following practices are found to have a negative effect:

1. Reducing sentence length by destroying interclausally explicit connectives.
2. Selecting simpler, but less descriptive vocabulary.
3. Altering the flow of topic and comment relations in paragraphs.
4. Eliminating qualifying statements that specify the conditions under which generalizations are thought to hold. (McCormick 1990)

Thus we can see the need for natural texts for teaching reading, not controlled or contrived ones. It is really difficult in Takia to write a decent story when limited to using only half the alphabet; it can't be meaningful, it can't be natural, and it definitely can't be interesting!

3.3. Approximating reading behaviors

What occurs in the reading lesson and on the primer page must be perceived as being relevant to real reading.

> From the onset, the question repeatedly asked by the students was, "When are we going to read?" By the time we finished lessons in the pre-reader and began work in the first primer, interest and enthusiasm had waned and more students were absent for longer periods of time in order to handle their normal social and economic responsibilities. The remaining students were happy to do the drills, but after only eight primer lessons general interest in continuing faded almost completely. . . It was obvious to us that . . . *these students were not grasping the materials as steps building up to reading.* (Vollrath 1991:18 emphasis mine)

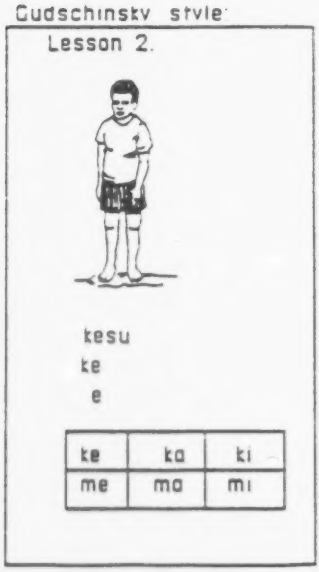
As mentioned before, learning by doing and imitating the real thing is often how skills are learned in the places where we work. Breaking the task down into small steps, learning the steps, and then putting them together is of lesser emphasis, if done at all.

> One of the more out-of-date ways to approach the teaching of reading was to emphasize the teaching of letters first, then

> words, then comprehension skills, then later to expose the learner to lots of easy reading practice. More recently, the tendency is to reverse this emphasis; to expose the child to lots of reading first and foremost. . . and then to teach smaller parts in a more informal way in the context of meaningful material. The theory is that although children do need to be taught word-attack skills, it is more important to realize that children learn to read by approximating reading behavior. (Harris 1987:45)

3.4. A positive focus on what is being taught, rather than negative

In some methods in which linguistic insights have influenced how reading is taught, consonants are not allowed to be presented in isolation, as they often cannot be pronounced *correctly* on their own. This has led to the practice of teaching by negative focus. Aboriginal teachers in Australia have found this very confusing. When some combined this with complex syllable boxes, teachers and students alike often became confused as to what was being taught. I suspect this type of problem is not confined just to Australia.



3.5. Phonics is a helpful decoding strategy; it should be taught early and quickly.

The 1986 United States Department of Education booklet *Research about Teaching and Learning* (p. 21) states:

> Children get a better start in reading if they are taught phonics. Learning phonics helps them to understand the relationship between letters and sounds and to *break the code* that links the words they hear with the words they see in print. . . On the average, children who are taught phonics get off to a better start in learning to read than children who are not taught phonics.

Research indicates that teaching phonics is helpful to beginning readers. However, this needs to be balanced by teaching other types of reading strategies too, and the teaching of phonics should not be dragged on for too long in any one lesson nor in the total teaching package.

> Phonics ought to be conceived as a technique for getting children off to a fast start in mapping the relationships between letters and sounds. . . Once the basic relationships have been taught, the best way to get children to refine and extend their knowledge of letter-sound correspondences is through repeated opportunities to read. . . A number of programs try to teach too many letter-sound relationships and phonic instruction drags out over too many years. . . The right maxims for phonics are: Do it early. Keep it simple. (Anderson et al 1985:38, 43)

3.6. Decoding involves more than letter by letter analysis

Word identification is not just "identification of the constituent letters and their sounds." (Anderson et al 1985:11)

> . . . a possible interpretation of a word usually begins forming in the mind as soon as even partial information has been gleaned about the letters in the word. The possible interpretation reinforces the analysis of the remaining information contained in the letters. When enough evidence from the letters and the context becomes available, the possible interpretation becomes a positive identification. (Anderson et al 1985:11)

A language does not use all possible arrangements of the sounds or letters comprised in its system. If accidentally a forbidden combination appears, we automatically correct it to what we think it should be. E.g. If we transpsoe some of hth lettres in a text, it sitll remians surprisingly intleligible. One cuold even get used to htis sort of thing aeftr a hwile."Or one cn lve out ltrs nd the msg will be nvrthlss qte understndbl. Ths is abrvtn. Smthg lke ths is dne in Hbrw wrtg, whr only the consnts ar wrtn."Eaven extry lettchrs kan bee ritten, withaoutt mutch harm beaing dun.
Mike Dilena, *The Active Reader.*

The inference to be drawn from this is that it is not necessary to teach total syllabification of every word, but rather to encourage the use of the beginning sounds along with the context of the story to help in decoding.

3.7. Link content to motivation

Vollraths with the Hewa in PNG and Borneman with Kriol in Australia found that people felt their expectations were fulfilled better when the reading lessons were connected to the actual things they wanted to learn to read. Vollraths initially tried a traditional Gudschinsky approach.

> . . . It was obvious to us that . . . these students were not grasping the materials as steps building up to reading. The objectives that we had set for the course . . . had been accomplished, but students' expectations of being able to read had not been met, and there was no interest in resuming further study. (Vollrath 1991:18)

Some years later, Vollraths decided to develop a Whole Language approach, using scripture text as the foundation for reading and writing lessons.

> Returning from furlough in August, 1989, we found that there continued to be a general coolness towards literacy, but the desire to acquire more knowledge about Scripture was extremely high.
>
> The whole-language approach has proved ideal in the Hewa context because each student can determine and control his own material and the pace at which he prefers to handle it in

order to meet his own unique set of expectations. (Vollrath 1991:19, 25)

It is advantageous to base the primer lessons on something that people actually want to learn to read. Mack Graham (Kandawo, PNG) designed a primer to teach people to read three local legends.

> By the time they finish the primer they will be able to read these three books. Hopefully they will be able to feel confident to try other books, but at least they will be able to read these three. (Personal communication)

3.8. Lesson format should be simple and flow naturally

The lesson format should be simple, so untrained teachers can understand the principles behind the format, handle the teaching of the lessons with ease, and yet be able to innovate and add to the lessons in meaningful ways. They should be able to control the materials well and be comfortable with them.

If this principle is followed, any person who has learned to read using the primers should be able, in turn, to teach someone else to read using the same materials. The simpler and more understandable the format, the less need there is for complicated training programs and complicated teacher's manuals. If natural teaching strategies are encouraged by the methods chosen, then lesson formats and guide books are simplified considerably.

Some national translators wish to make primers, but do not have help from expatriate advisors. We also have communities wishing to be involved in vernacular literacy, but which do not have any trained literacy advisors, either national or expatriate. We need to respond to the needs of these groups with a simplified lesson format.

The lessons themselves need to have a natural flow that leads the teacher through the necessary stages fluently.

> The lessons should have a natural flow (to some extent this is *logical*, to some extent it is *cultural*, to some extent it is *transcultural*, i.e., *natural*):
> *This *natural flow* should be evident at all levels/stages of the program: i.e., within each lesson (from one activity to

another), from term to term, from prep school to community school, etc.

*Part of the *naturalness* is the coherence within each lesson, within each term, within the program as a whole, with regard to the relation between prep school and community school.

*There should be a progression (= *flow*) from known to unknown, from simple to more complex at every transition: within each lesson (from one activity to another), from term to term, from prep school to community school, etc. (McCormick 1990)

The primer lesson design I developed for use at the Madang Teachers College did this to some extent because it started with a chunk of Whole Language (meaningful text). From that it focused on sentence level, then word level, then phoneme level, and then built back up to word level, sentence level, and finally to the whole chunk. I designed it that way so the student teachers would be forced to follow the logical steps when constructing the primer. In doing so, they keep a natural flow throughout the lesson.

3.9. Reasoning behind the approach must be easily understood

Too often our training programs neglect our most valuable resource, the intelligence and skill of the teachers themselves. SIL has not done a lot to educate nationals of what reading is all about and what happens during the reading process. Instead, we have given them a recipe and tried to teach them to follow it. This is often because of a language barrier, lack of time, beliefs about the abilities of nationals, or because we have not perceived how important it is that the teacher should understand the *why* of what is done.

We need to devise ways of communicating some of the theoretical background behind what is important in teaching reading so nationals can reflect on what they are doing. They themselves can then think of ways in which approaches may be modified to fit the culture better, given the resources they have at their disposal. Teachers who understand what they are doing get better results.

> One most important application is that inasmuch as the teacher him or herself is the most important factor in reading instruction (and there is excellent research support for this conclusion), the teacher who understands the reading process

best (whether intuitively or self-consciously) will be the better teacher. (McCormick 1990)

4. CONCLUSION

Each situation is unique. Some factors are more important in one situation than in another, and this is why we should not concentrate on developing recipes for people to follow. Rather we should be aware of the results and application of reading research, of the basic principles of program design, and of the guiding principles for how reading should be taught.

Balancing the local factors, the personnel factors, and the guiding principles for teaching reading may require some flexibility and creativity. For example, some might say that we should not design a primer based on translated scripture on the grounds that the schema is unfamiliar, but if motivation for reading comes mainly from wanting to read the Bible, then this is precisely what should be done! The game is never to follow a formula or recipe; the idea is to weigh all the factors and decide what the crucial ones are, and build on those. Successful and enthusiastic readers is what the game is about.

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WHAT TEXT ALTERATION STUDIES REVEAL ABOUT ORAL READING

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1. INTRODUCTION

Oral reading is a significant aspect of literacy programs. It is the means by which a literate people share their ability with others and convey written information to those who cannot read. Literates often read for illiterates, especially in areas where literates are few.

In literacy instruction, oral reading plays an important role in the evaluation of a student's progress. In sophisticated reading instruction programs, oral reading and comprehension testing are the two main ways to measure a student's reading ability. In Peruvian highland communities and schools, oral reading is often the only measure of how well one reads. A common experience of education specialists in these areas is to hear someone "reading" aloud in Spanish, syllable by syllable, and then realize that the reader does not understand what he has just read. Nevertheless, both reader and listeners regard this as reading.

The role of oral reading in literacy makes it important to understand how it works and what people actually do when they read aloud. What does oral reading reflect? If someone reads aloud well, has comprehension taken place? This paper examines recent research in the area of oral reading, and attempts to apply those findings to vernacular literacy programs in Peru.

2. THE DECODING AND COMPREHENSION HYPOTHESES

The principal issue in oral reading research is whether it occurs before, after, or concurrently with text comprehension (Danks & Fears 1979). Is oral reading simply an interpretation of the phonological representation, or does it depend on text comprehension? The *decoding hypothesis* holds that oral reading vocalizes a phonological representation of the text. According to this theory, text comprehension is not necessary for oral reading. The *comprehension hypothesis* contends that oral reading vocalizes a semantic representation of the text. According to this theory, the phonological representation is not the source of oral reading.

Several means may be used to test these hypotheses, including measurement of oral reading rates, miscue analysis, eye-voice span

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studies, and text alteration studies. All these methods have yielded significant results, but this paper focuses on text alteration studies as a better way to understand oral reading.

3. TEXT ALTERATION STUDIES

Text alteration studies are a fruitful source of evidence about oral reading processes. In such studies, text is altered in specific ways to introduce errors of a graphic, syntactic, or semantic nature. The subject reads the altered text aloud. The resultant reading disruptions, such as pauses, mispronunciations, omissions, and regressions, help identify the reading process (Danks, Bohn & Fears 1983).

Text alteration experiments provide a means to distinguish between the use of purely graphic information and the use of more abstract syntactic, semantic, and lexical information (Danks and Fears 1979). Information at different levels of abstractness is distorted or removed from a segment of text. If a given type of information is needed to process the text, oral reading would be disrupted at the point where the information is violated.

Danks and Hill (1981) describe experiments in which they altered lexical, syntactic, semantic and factual information in texts. At the graphic level, they replaced critical words like *injured* by pronounceable nonwords like *brugen*. They distorted syntactic information by changing the inflectional suffix of a critical word (replacing *injured* with *injury*). They distorted semantic information by replacing a critical word with a word that was the same part of speech but did not make sense in the context (*injured* replaced by *planted*). To distort both syntactic and semantic information, they replaced a critical word like *injured* with one like *iceberg*. Factual information, described by Danks and Hill as "what the reader accumulates from the proceeding text while reading a story," was distorted by altering one sentence with respect to the next. For example, one sentence established the main character as physically strong; the next sentence implied that she is physically weak. Both sentences were syntactically and semantically correct, but the information they communicated was inconsistent.

Danks and Hill posit three processes or tasks of oral readers. The first task is lexical access, tapping into the mental lexicon to match incoming graphic data with a previously known lexical representation. The information found in the lexicon then allows oral reading of the text. A disruption in the lexical access task disrupts oral reading *before* utterance of the distorted critical word.

The second task for the reader is clause understanding and integration. This task generally proceeds word by word, accompanying oral reading of the text. Distorting text meaning causes clause integration to fail, diverting attention from looking ahead to the next words. Instead, the reader tries to make sense of the distorted text already read. The result is a disruption of oral reading *after* utterance of the distorted critical word.

The third task for the reader is to make sure the text meaning is coherent. Normally, word by word integration of the text does this. However, factual distortions in text disrupt oral reading at the end of the clause, while the reader tries to reestablish coherency through recall.

The text alteration experiments demonstrated the following:

1. Lexical, syntactic, and semantic distortions disrupted oral reading *before* uttering the critical word. This shows that the lexical access task is affected by these distortions.
2. Lexical, syntactic, and semantic violations also disrupted oral reading *after* uttering the critical word. This shows that the clause understanding task is affected by these violations.
3. Combined syntactic and semantic distortions caused more pronounced disruptions than did distorting only one kind of information. Semantic and syntactic information thus appear to have separate knowledge sources, and both are active in lexical access.
4. Readers often corrected syntactic distortions unconsciously by changing the inconsistent suffix on the critical word. The original root word is processed using graphic, phonological, syntactic, and semantic information, followed by prediction of the following suffix. Once perceptual processing of the word ends, the reader does not notice the altered suffix.
5. Factual inconsistencies interrupted lexical access little, though they did interfere with word by word integration of meaning. Major disruptions caused by factual inconsistency came immediately *after* the clause boundary.
6. Pronounceable nonwords caused disruption of oral production both before and after the distorted critical word. This shows that the reader depends on more than graphic information to read words.

4. AN INTERACTIVE MODEL OF ORAL READING

Text alteration findings support an interactive model of oral reading. According to this model, the reading process is an interaction between textual features, the reader's goals and expectations, his knowledge of the world, and his ability to use that knowledge to process text (Ruddell and Speaker 1985). In this model, information flows from text to reader and from reader to text. Outside knowledge converges with visual, syntactic, and semantic information in this model of reading.

According to the interactive model, oral reading follows lexical access. Once the reader finds the word in her mental lexicon, she can pronounce it (Danks and Hill 1981). Oral reading is more than vocalizing a graphic code. This is shown by the behavior of new readers encountering an unfamiliar word for the first time. Typically, they sound it out, breaking it into smaller units of syllables or phonemes. Then they repeat the word, based on their understanding of what it means. The interactive model of oral reading posits that graphic rules control the first pronunciation, and the semantic and articulatory rules in the mental lexicon control the second. Oral reading thus occurs after lexical access has allowed semantic and syntactic information to interact with knowledge of the phonological code.

Findings from other testing methods also support the interactive model of oral reading. Oral reading rates show that fluent readers read words as fast as they do letters. The reader interacts with the written text, using prior knowledge to help decode the words. What the fluent reader knows about the language's orthography helps him to predict successive letters. Fluent readers can read words as quickly as they can read random isolated letters, which offer no context clues, but must be decoded based on letter shape alone.

Miscue analysis findings support the thesis that oral reading is interactive because the fluent reader's miscues usually maintain the grammatical features of the misread text. The reader often corrects miscues that do not make sense with the preceding text. Eye-voice span studies show that the oral reader proceeds clause by clause, with interactive processes helping to predict the clause boundaries.

5. IMPLICATIONS FOR LITERACY

What implications do these findings have for literacy programs? One area to think about is how we measure people's reading ability

based on their oral reading performance. If a person reads words differently from letters or syllables, we can assume that she is accessing syntactic, semantic, lexical, and graphic information. This shows that the person is looking for meaning. If a person reads letters, syllables, and words at a speed needed to focus on each letter, we can assume that he uses only graphic information to process the text. Halting reading may indicate that the reader's word by word integration process is not efficient. He needs to strengthen that process by learning to use semantic and syntactic information for prediction, not being so dependent on only graphic information. Frequent regressions to reread a phrase or clause are clues that the reader's meaning integration at the clause level is not efficient. The reader needs to develop comprehension at a higher level by looking for main ideas in a text or by questioning that requires integration of meaning from several sentences.

Insufficient knowledge of the language being read will affect all these processes. The bilingual who has difficulty reading in her second language may lack needed semantic and syntactic information about the second language.

Furthermore, a vernacular-speaking semiliterate who "word calls" in Spanish (that is, reads Spanish syllable-by-syllable without comprehension) does not necessarily transfer that reading behavior to his mother tongue. If the interactive model of oral reading is correct, lexical access uses semantic, syntactic, and graphic information. The Peruvian Quechua who reads in his mother tongue should read better because he has far more information available. He can use that information to read with comprehension in his mother tongue, though he may need to practice looking for meaning. Danks and Fears (1979) and others doubt the existence of true word callers. When referring to reading in the mother tongue, they may be correct. However, word calling is prevalent among incipient bilinguals taught to read in Spanish-speaking schools.

For all of these reasons, mother tongue literacy materials and programs need a strong emphasis on comprehension and use of context. Exercises in these areas will help the poor reader increase the efficiency of his meaning integration processes. Readers trained to form expectations about upcoming text take less time to process it.

The comprehension component in literacy materials and programs should concentrate on connected text for reading practice, followed by questions about the text. Readers should know in advance that they will be questioned about the text. Questions can range from the simple yes/no-type to more conceptually difficult content questions,

but they should focus on the semantic aspects of the text. Exercises can teach the reader to predict syntactic structures, using common suffixes and how they alter the meaning of a text. Excessive use of syllable lists and word lists should be avoided because they do not use syntactic or semantic information.

Most important, the text used for reading must be in a language that the reader speaks well. The research described here shows that the reader's experience must include knowledge of the language and world in which the text is based. This is especially true for the beginning reader, who must learn to use semantic and syntactic information for meaningful reading.

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REVIEWS

Cognition and learning: A review of the literature with reference to ethnolinguistic minorities. By Patricia M. Davis. Dallas, TX: The Summer Institute of Linguistics, 1991. Pp. ix, 80. Paper $6.00.

Reviewed by Jann Parrish

This book, as the title suggests, is about theories of cognitive development and learning with a focus on cross-cultural education. It gives a brief history and descriptions of predominant theories, with a lot of information packed into its 80 pages. The book is fairly easy to read, but there is very little introduction, so if this is your first reading on the subject, it might take a while to get into it.

Throughout the book there are helpful suggestions for teachers on how to apply the theoretical material. These are based on the author's 20 years of experience with SIL, working with various bilingual school programs in Peru.

There are three chapters:

1. Developmental Theories
2. Information Processing Theories
3. Learning Styles and Teaching Methods

Chapter 1 focuses mainly on Piaget's four stages of human cognitive development:

1. Sensorimotor stage (0-2 years)
2. Preoperational stage (2-7 years)
3. Concrete operations stage (7-11 years)
4. Formal operations stage (12+ years)

Davis discusses some of the cross-cultural research done on the third and fourth stages to see if ethnolinguistic minorities demonstrate the same stages of development as people of European heritage. A study by Bonet showed that different cultures may acquire different concepts in varying orders based on how frequently certain activities are performed. Other studies demonstrated that people from technologically undeveloped societies do not have less mental capability than do those from technologically advanced societies; their environment may stimulate only a certain level of cognitive development.

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A study by Klich and Davidson gives some insights that are good for us to remember when doing field work. We need to be careful how we interpret cultural factors because cognitive competence seems to be culturally relative. We may think it is great to be able to think in the abstract, but some cultures apparently do not need to think that way as much as others. We need to remember that family, society, and the environment are major factors in cognitive development.

Chapter 2 is more directly related to teaching and thus more practical. It discusses four theories of information processing:

1. Reception learning (Ausubel's "advance organizer" to aid in teaching new material is discussed. Appendix A gives an example of this.)
2. Schema theory (Anderson)
3. Information processing (Gagne)
4. Social learning theory (Bandura)

Of the four, social learning theory is the most unique. "Since instructional techniques are in strong focus, some educators tend to think of [it] as an educational methodology rather than a theory of cognition" (p. 27). It seeks to explain how a society transmits its values and skills through the modeling of behavior and through reinforcement. Reinforcement can be external, internal (self-reinforcement), or vicarious (observation of rewarded or punished behavior). Jenny Golden, a literacy worker with SIL, related to our literacy class an experience she had in the Philippines. She praised a young boy in her class in front of the other students, and he subsequently began misbehaving! Obviously not all cultures view reward and punishment in the same way. We need to be sensitive to these factors when giving external reinforcement.

Chapter 3 describes different learning style theories. Though these theories use different terminology, there are many similarities among them. Witkin's model of field dependence (FD) versus field independence (FI) is discussed first, and other models, such as relational/analytic, global/linear, and synthesizing/analyzing, are related to it.

The section on "societal variance" (pp. 36-37) was especially interesting. Though learning styles tend to be an individual matter, societies are usually predominantly FD or FI. Another interesting

point made by Pepper and Henry is that, although it is good to teach in a manner that corresponds with students' learning styles, it is also good to help students acquire different learning styles. This will help them to develop intellectually and to learn in various environments. These and other results of learning styles research are presented along with suggestions helpful in setting up and conducting a classroom. There is a small section on culturally-sensitive teacher training, and Appendix B provides a corresponding checklist for such training.

Cognition and Learning is a concise, well-written book that saves one from going to many sources to get the same information. This book would make an excellent textbook for a class dealing with cognitive development or learning styles. It would also be good for novices just beginning in the field or for classroom-weary field workers who need some fresh insight and new ideas on how to help their students learn.

Development program planning: A process approach. By David H. Spaeth. Dallas: International Museum of Cultures. 1991. Pp. x, 159. Paper $12.50.

Reviewed by Brad Barber

David Spaeth's *Development Program Planning* describes an approach to program planning that can be applied to planning any aspect of the work of SIL: translation, literacy, or community development. The writer's goal is to extend and enhance the program planning procedures outlined in the Strategic Planning and Review (SPAR) manual, SIL's language program planning guide.

David Spaeth holds a Ph.D. in Agricultural Economics. He acquired a wealth of experience in program planning in both the public and private sectors before joining SIL in 1982. His cross-cultural experience includes work in Taiwan with the United States Department of Agriculture and service in Papua New Guinea with SIL. These experiences spurred him to develop the pragmatic method presented here for solving complex human relations problems.

The first few chapters give an overview of human systems behavioral models, followed by a point-by-point explanation of the model used in Spaeth's approach to planning. He illustrates features

of the model with examples from case studies and from his own wealth of practical on-the-job experience. The examples add a degree of readability and practicality to an otherwise highly theoretical text.

Designing a development program is more than a matter of just imitating existing successful programs. One should not expect to duplicate a successful development program in a different culture with a different history and ecology. Spaeth's program planning strategy is to develop a set of questions to facilitate transferring the lessons learned from successful projects and apply them to another situation. This approach recognizes the different culture, history and ecology in the new situation.

Spaeth's underlying theory is that there are universal principles that govern the interaction of human systems with their environment. These principles apply in any cultural setting. Spaeth's model, the Necessary and Sufficient Conditions (NSC), is a human systems behavior model listing six conditions considered sufficient and necessary for successful achievement of goals by a group:

1. Pertinent and reliable information must be available.
2. There must be a motivating sense of need.
3. The performance of the chosen course of action must be physically and logistically practicable.
4. All necessary social positions and their associated roles must be related to each other by appropriate communications.
5. Occupants of the social positions must have the capacity, knowledge and skills to meet performance expectations.
6. All social position-occupants, and the resources available to them, must be committed to an agreed-upon schedule of performances.

Spaeth acknowledges the difficulty of developing a model that will accurately predict human behavior. Some systems are too complex to simulate because many of the variables are unknown. One can never be sure that all of the factors operating in a human system are adequately represented in the model. The author recognizes this and emphasizes that the NSC model is to be used to *sketch* goals and objectives. Planning is seen as an evolutionary process. With regular evaluation and review, one gradually *zeros in* on increasingly realistic goals and objectives.

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The NSC model is designed to enhance the SPAR manual's planning guidelines. The idea is to check for the six NSC conditions (information, motivation, practicability, organization, know-how, and commitment) at each stage formulating the Strategic Master Plan of the SPAR planning sequence. If NSC conditions are found to be lacking, the planning strategies and rationale must be reexamined.

Frames of mind: The theory of multiple intelligences. By Howard Gardner. New York: Basic Books, 1985. Pp. xx, 393. Paper $12.95.

Reviewed by Dee Stegeman

In *Frames of Mind*, Howard Gardner introduces a well-researched alternative approach to viewing human intelligence for those willing to put aside the standard paper and pencil/short-answer methods of diagnosing intelligence and consider the wider range of performances valued world-wide. Gardner presents as his four-fold purpose for writing the book:

1. To expand the purviews of cognitive and developmental psychology.
2. To examine the educational implications of a theory of multiple intelligences.
3. To inspire educationally oriented anthropologists to develop a model of how intellectual competences may be fostered in various cultural settings.
4. To have this point of view prove of genuine utility to those policy makers and practitioners charged with the development of other individuals.

Gardner's book is divided into three parts. Part I is dedicated to a thorough discussion of intelligence in its broadest sense: the evolution of man's understanding of intelligence, biologically, as well as cognitively. In Part II, he devotes a full chapter to each of the six intelligences: (1) linguistic intelligence, (2) musical intelligence, (3) logical-mathematical intelligence, (4) spatial intelligence, (5) bodily-kinesthetic intelligence, and (6) personal intelligence. He also includes in this section a critique of his own theory. Part III,

"Implications and Applications" contains the chapters "The Education of Intelligences" and "The Application of the Intelligences."

I am extremely impressed with the excellent organization, clarity, and literary flow that characterizes Gardner's writing. *Frames* is the result of over a decade of extended academic and experimental research. Gardner's greatest desire is that his readers, regardless of their academic status, be able to understand and use the information presented in this book. In the beginning of the book, Gardner creates a sketch of three individuals, each successful and esteemed in their respective career: a 12-year-old male Puluwat sailor in the Caroline Islands who has been selected by his elders to learn how to become a master sailor, a 15-year-old Iranian youth who has memorized the entire Koran and mastered the Arabic language, and a 14-year-old Parisian who has learned to program a computer and is beginning to compose works of music with the aid of a synthesizer. Throughout the book, Gardner brings these characters back to clarify his points. He also ends each chapter with a lead-in to the next, and starts each chapter with a brief summary. Each of these techniques contributes to the production of a very readable, if lengthy, book well worth the time.

Essays into literacy. By Frank Smith. Concord, Ontario, Canada: Irwin Publishing, 1983. Pp. 157 pages. $20.00.

Reviewed by Mary Jane Cooper

On the first page of the introduction, Frank Smith states, "I am too realistic to expect to change the world." What an understatement! I know that many of us have been greatly influenced by Frank Smith's writings, and that is exactly why we have been brave enough to fight the *status quo* and use more *whole language* approaches. Without the encouragement of authors like Smith, many of us would still be wallowing, with our illiterate students, in the extreme analytic approaches that have been so popular in SIL.

Essays Into Literacy gives interesting insights in the overall process of language and literacy. Smith states, "Children do not arrive at school ignorant, though they may arrive illiterate." (p.1) How many people would distinguish between the two? Many feel that illiteracy and ignorance are one and the same. These "experts" often take over

in the area of literacy, allowing little or no input from the people they will be teaching to read and write.

Smith distinguishes between two kinds of ignorance: soft-core and hard-core. Soft-core ignorance is found among those "who feel they need to be told what to do." Hard-core ignorance "is the belief that you know the answers to all problems and can do the thinking for other people." (p. 4)

A statement that alone is well worth the price of the book is "Children learn to read by reading and the sensible teacher makes reading easy and interesting, not difficult and boring." And yet, how many involved in literacy are guilty of using difficult and boring analytic approaches to teach others to read.

Smith admits at the end of the book that he has never taught grade-school. He has wonderful insights, but tends to come across as being sometimes negative and judgmental. Nevertheless, I am still impressed with this book. According to Smith, the 13 chapters are 13 papers he wrote over a 10 year span.

Chapter 2, "Twelve Easy Ways to Make Learning to Read Difficult and One Difficult Way to Make it Easy," is a key chapter. The twelve most common errors reading teachers make, according to Smith are to:

1. Aim for early mastery of the rules of reading.
2. Ensure that phonic skills are learned and used.
3. Teach letters or words one at a time, making sure each new letter or word is learned perfectly before moving on.
4. Make word-perfect reading the prime objective.
5. Discourage guessing; be sure children read carefully.
6. Insist on accuracy.
7. Provide immediate feedback.
8. Detect and correct inappropriate eye movements.
9. Identify and give special attention to problem readers as soon as possible.
10. Make sure children understand the importance of reading and the seriousness of falling behind.
11. Take the opportunity during reading instruction to improve spelling and written expression and also insist on the best possible spoken English.

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12. If the method you are using is unsatisfactory, try another. Always be alert for new materials and techniques. (p. 11)

Smith gives the alternative to this list of errors. "*The only way to make learning to read easy is to make reading easy.*" (p. 23) Being a nonanalytical person, I certainly say AMEN to that! Smith states that the antithesis of the twelve easy ways is to "respond to what the child is trying to do." This rule, he says, is difficult because it "requires insight, tolerance, sensitivity, and patience; it demands an understanding of the nature of reading, a rejection of formulae, less reliance on tests, and more receptivity to the child." (p. 24)

About the time the book is bogged down with theory Smith throws in Chapter 10 "The Unspeakable Habit." I found this chapter very refreshing and full of interesting insights on talking to oneself, which I am certainly guilty of. I laughed all the way through it and you probably will too.

If you need a good laugh (Ch. 10) and valuable insights on the process of reading, you will want to add this book to your library. I did.

Write the vision: A manual for training writers. By Marion Van Horn. Legion, IL: David C. Cook Foundation, 1990. Pp. 148. Paper $7.95.

Reviewed by Sally McNees

Overall, this is a great book to help you prepare checklists for your preparation of a writers' workshop or to pass on as you train others to teach. It is clearly written and pleasant to read, with a lot of room in the margins for notes. You will want to take notes as the orientation, despite her world-wide experience in literacy, is still very western. (I had to laugh when she recommended passing out name tags to the participants on the first day of class.) The author includes many good *in-class activities* and *practice writing* ideas, but it will be up to you to adapt a few of them for use with non-Christians, new readers, and people of non-western culture.

Here is the table of contents, with my comments in brackets:

YOU CAN LEAD A WORKSHOP

1. Why workshops?
2. Adult writers--lifelong learners
3. Teaching writing in a workshop

THE WRITERS' WORKSHOP [chapters 4-12 have practice exercise ideas]

4. Christian writers' task [a challenge to Christians]
5. Elements of writing [the audience, gathering material, choosing words carefully, verbs for action, simple sentences]
6. Organize your writing [outlining, introduction-body-conclusion]
7. Practice different forms of writing [description, narrative, exposition, argument]
8. Write a news article [interesting, and some of us may never have learned this]
9. Write a magazine article [likewise, we ourselves may not know this]
10. Write a short story
11. Write for children and young people [not detailed enough to be too helpful]
12. Write for the new reading public [some good reminders for our reading situations, using pictures]
13. Editor and writer: a partnership [good checklist ideas, but the editor described here is far more "big-time" than we would need for our workshops]

RESOURCES FOR WORKSHOPS

14. Planning a writers' workshop [very helpful]
15. After the workshop: only the beginning [ideas for how to keep the new writers writing]
16. Workshop forms [not helpful]
17. Prayers for writers

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The adult writer described here is, on the average, longer educated and has a wider variety of experiences than our new writers. The

manual presents enough material to keep a class very busy for at least three weeks.

Education and cultural process: Anthropological approaches, second edition. Edited by George D. Spindler. Prospect Heights, IL: Waveland Press. 1987. Pp. xviii, 505. Paper $20.95.

Reviewed by Juliana Kelsall

This book provides an interesting, in-depth, and practical look at educational anthropology from a variety of perspectives. The book is organized into six sections:

Part I--Background
Part II--Some Foundations of Primate Learning
Part III--Approaches to the Study of Schools
Part IV--Education and Cultural Process in the United States
Part V--Cultural Process in Education Viewed Transculturally
Part VI--The Teaching of Anthropology

Each section has a "preview" summary and commentary by Spindler. The previews highlight some key insights and help provide a unifying thread that ties the sections together. The order of the sections gives a natural, progressive flow to the book. At the same time, each chapter and section can stand on its own. Thus, readers may select readings relevant to their needs or interests without having to read the entire book.

The introductory chapters of Part I provide an understanding of the foundations and approaches on which the subsequent case studies are based. Much of this background seems more theoretically dense than most non-specialists in educational anthropology might be interested in. However, it does raise the issue of the "hidden curriculum," that is, that *intended* learning is always accompanied by *unintended* or concomitant learning.

The point that learning and teaching theories must be applicable in natural settings highlights the potential contribution of applied anthropology through ethnographic research. The fact that people learn as individuals even though they are members of a society provides a warning about drawing broad conclusions about a culture

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from limited data: no single individual knows everything about his culture, and older individuals are continually learning more.

Wolcott's case study of his experience as a teacher in a Kwakiutl school gives some interesting insights into the problems of using western educational methods in a cross-cultural setting. He points out the potential usefulness of the teacher's discovering his ascribed role and then using approaches in line with that role, rather than trying to change the students' perception of that role.

Part IV has interesting case studies from the United States. Spindler's chapter on minority students raises the point that miscommunications in teacher-student relationships can lead to patterns of student inattention that can eventually be "encoded" into the central nervous system, giving rise to learning disabilities. Hostetler's chapter on the Amish and Hutterites discusses the impact of educational systems on the transmission of culture. The American values of individual initiative and self-development, which are transmitted in the educational system, clash with the Amish and Hutterite goals of community maintenance and subjection to God. An interesting outcome of the analysis of cultural maintenance in relation to education was that the Amish, who make the least use of formal education, are the most vulnerable to losing members of their society.

Gibson's case study on Punjabi Sikhs in a rural California setting gives insights into the performance of immigrant children in American schools. The three sets of variables that the author mentions in regard to the success or failure of immigrant groups in host culture schools are: (1) the group's cultural preferences, (2) the historical context of the group's settlement in the host culture, and (3) the group's response to their current situation.

In the chapter that opens Part V, Spindler gives a broad overview of the transmission of culture via child-raising practices, illustrated with excerpts of case studies from several cultures. Of particular interest is the connection noted between the degree and type of personal independence which is encouraged in children and the resulting characteristics of adult social relationships and interactions within a given cultural context. Studying this connection could go a long way in helping cross-cultural workers understand and appropriately relate to the people among whom they work.

In Part VI, Spindler's chapter on "Transcultural Sensitization" describes his technique of showing slides of a new culture and having students write their interpretations of them. This brings to light the various ways that people's perceptions of a cross-cultural situation can be distorted. The more ambiguous a situation is, the more likely it is that a person will project his own cultural experiences and stereotypes onto it. This technique has practical application in training people for cross-cultural work.

Readers may use the information and interesting insights in this book to broaden their perspectives on the processes of education and enculturation. This book also stimulates consideration of ways to improve effectiveness and training for doing cross-cultural work, especially in regard to education.

Interpretive ethnography of education: At home and abroad. Edited by George and Louise Spindler. Hillsdale, NJ: Lawrence Erlbaum Associates. 1987. Pp. xiii, 505. Paper $34.50.

Reviewed by Trent Thevenot

Interpretive Ethnography of Education: At Home and Abroad is a collection of writings by eighteen authors dealing with a wide spectrum of issues and problems found in education. Due to the variety of topics, this book is useful to professional educators and to those interested in education. It includes chapters on how to do an ethnography of schooling, immigrants and minorities in our schools, schools abroad, and schools attended by mainstream students. All the chapters are based on ethnographic fieldwork.

George and Louise Spindler are faculty members of Stanford University and visiting professors at the University of Wisconsin at Madison. They have collaborated on research and publication since 1948 on subjects such as culture change and modernization, psychocultural adaptation, cultural transmission, and the ethnographic study of education. Between them, the Spindlers have taught every grade from kindergarten to the advanced graduate level, writing and editing more than two hundred books.

The book is divided into three parts. The first part, (chapters 1-6) "Issues and Applications in Ethnographic Methods," exposes the

reader to the strengths and weaknesses of ethnography. This is intended to aid in the appraisal and appreciation of the rest of the book. This part of the book may seem abstract and theoretical to those without prior training in ethnography.

The second part, (chapters 7-11) "Comparative and Cross-cultural," reports on field research in Germany, France, England, and the People's Republic of China. The authors show that we can profitably use the cross-cultural approach to study complex, modern societies. The Spindlers describe and interpret their long-term study of an elementary school in Schoenhausen, Germany comparing certain features of it to an elementary school in Wisconsin. Kathryn Anderson-Levitt describes the cultural knowledge that French elementary school teachers use in the teaching of reading, comparing it to the cultural knowledge used by American teachers in American schools. Paul David Yates reports on the prejudices that arise in an English middle school with a multicultural student body. Norman A. Chance looks inside the educational system of the People's Republic of China, and the effects the cultural revolution had on the Chinese people.

The third part, "At Home in the USA," reminds us of the effect culture has on education in our own multicultural society. Chapters 12-17 are devoted to migrants and minorities. John Ogbu's chapter is on the variability in minority responses to schooling, comparing the experience of immigrants to that of nonimmigrants. A chapter by Jose Macias tells of Papago Indian strategies for mitigating cultural discontinuity in early schooling. Other chapters discuss Punjabi immigrant youth in a California high school, the Silicon Valley Vietnamese community and its reinforcement of Vietnamese occupational adaptations, and the discontinuity in the home and school environments encountered by Mexican-American children.

Chapters 18-22 deal with mainstream USA. Joyce Canaan's chapter on cliques in a middle school and high school shows the importance of social life among American adolescents. Ruth Goodenough's chapter found the emergence of sexism in children in nursery and kindergarten groups. Reba Page's chapter on lower-track classrooms in an academically oriented, upper middle class high school exposes the pattern of interaction between teachers and

students that undermines the joy of teaching and learning. Finally, Susan Jungck reports on computer literacy in a mainstream middle school.

The book is complex and heavily laden with a broad spectrum of topics on education. As George and Louise Spindler said, "There is so much to be learned about so much." This book provides us with a significant start on understanding the complex phenomena of education.

Enhancing adult motivation to learn. By Raymond J. Wlodkowski, San Francisco: Jossey Bass Publishers, 1990. Pp. xix, 314. Hard cover $26.95.

Reviewed by Mike Bryant

Enhancing Adult Motivation to Learn is a good reference book for those who may be struggling with adults who see little purpose in learning. It discusses many of the reasons for a lack of student motivation and provides strategies to combat it. It incorporates psychology, as well as education theory, but is written in a way easy for anyone to read and understand.

Raymond Wlodkowski is an associate professor of educational psychology at the University of Wisconsin-Milwaukee, having earned a Ph.D. in educational and clinical psychology. He is a licensed psychologist and certified school psychologist with experience as a family therapist.

The purpose of this book is to look into the psychological aspects of motivation in order to determine what does and does not motivate adult students. It provides many ideas on how a teacher may enhance or develop motivational tools for use in the adult classroom setting.

The book can be divided into two major sections: theory and practice. The first three chapters focus on why motivation is important to instruction, the characteristics of a motivational teacher, and what types of things motivate adults to learn.

Motivation is important to instruction because:

1. Without motivation (positive or negative), there is no learning.
2. Learners who leave a learning situation feeling motivated are more likely to have a future interest in using what they have learned.

3. Motivated learners work hard and with more vigor.
4. Motivated learners are more cooperative.
5. Instructors are more willing to teach motivated learners.

Some characteristics of a motivational instructor are as follows:

1. One who knows the material and is well-prepared.
2. Instructs on learner's level and constantly considers the learner's perspective.
3. Values the material being taught and conveys this to the learner in a way that he also values it.
4. One who is organized and can be easily understood.

Some things that motivate adults to learn are:

1. Good attitude from the instructor.
2. Desire or felt need to learn the material.
3. Stimulated by the material.
4. Positive emotions about the learning situation.
5. A sense of progress.
6. Positive reinforcement.
7. Motivational planning by the instructor.
8. Self-confidence.

The rest of the book deals with strategies to help adults have a positive learning experience and how to integrate these strategies into the classroom material. The strategies are mostly *common sense*, though I found the book helpful in giving direction on how to apply these strategies in the classroom. Wlodkowski suggests that an instructor always ask six basic questions while preparing to teach (p. 258):

1. What can I do to establish a positive learner *attitude* for this learning sequence? (emphasis on beginning activities)
2. How do I best meet the *needs* of my learners through this learning sequence? (emphasis on beginning activities)
3. What about this learning sequence will continuously *stimulate* my learners? (emphasis on main activities)
4. How is the *affective experience* and *emotional climate* for this learning sequence positive for learners? (emphasis on main activities)
5. How does this learning sequence increase or affirm learner feelings of *competence*? (emphasis on ending activities)

6. What is the *reinforcement* that this learning sequence provides for my learners? (emphasis on ending activities)

Some readers may be uncomfortable with a suggestion to use relaxation and imagery techniques in the classroom because it helps "adults to more concretely experience the problem or task and to actually anticipate the benefits of their learning in an immediate and realistic manner."

The book is obviously directed toward a typical classroom situation in American society, though many of the strategies could be applied in cross-cultural situations. The layout of the book is easy to follow. Each strategy is given in a one-sentence form, followed by an in-depth explanation of what it involves and how it can be applied. It is easy to read because it lacks the jargon of similar books. It is an excellent book to skim for ideas. The book helped me to reflect on the experiences I have had in learning under motivational teachers and to see how I could apply the qualities I liked in them to my role as a teacher.

The acquisition of literacy: Ethnographic perspectives. Edited by Bambi B. Schieffelin and Perry Gilmore. Norwood, NJ: Ablex. 1986. Pp. 282. $29.50.

Reviewed by Ken Pagel

The Acquisition of Literacy: Ethnographic Perspectives is a good book for anyone interested in teaching literacy or who has children, though it may go into more depth than the average parent cares to read.

This book contains thirteen essays in which the authors share a view of literacy as being a social and cultural phenomenon. The essays focus on the social and cultural contexts and processes involved in the acquisition of literacy. They suggest that literacy is best studied by adopting an ethnographic perspective.

The book is organized into four sections. Part I (chapters 1-4) "Taking from Texts: Cultural Variations on a Theme" focuses on the organization and meaning of literacy events, which include reading and looking at picture books, especially with young children. These

literacy events are the avenues through which the culturally specific ways of taking information from written texts are acquired.

Chapter 1 "Early Reading at Home: Its Practice and Meaning in a Working-Class Community," by Peggy Miller, Anca Memolanu, and Judith Dejong focuses on how three working-class, unmarried mothers between the ages of 18 and 20 related to their children with respect to reading. Though there was not a great deal of reading material in these homes, these mothers were quite interested in their children learning to read. The children all had positive experiences with reading in the home. They did not do well in school, however, because the environment was uncomfortable for them. Besides the unfamiliar middle-class environment, the children in the study found a competitive atmosphere, which caused so much anxiety that they could not perform well. Still, children exposed to books on a daily basis during the preschool years have an edge on entering school.

Part II (chapters 5-8) "Connecting Oral and Written Modes: What Children Can Do in School" explores different approaches to literacy. These approaches use different genres of oral language, orally presented written language, and dialogic written language.

Chapter 6 "Six Authors in Search of an Audience" by Deborah Braig points out that students need to be made aware that writing is a form of communication. It must conform to norms that other people can decode, as with any other form of communication. In other words, they must develop the idea that their writing should be directed to an audience. The method Braig used was to have six students between the ages of six and eight keep interactive journals. They wrote to her, and she responded. Whenever she could not understand what her pupils were trying to say, she would write to ask for clarification. The children in this study were motivated to develop writing skills to use their writing as a means of communication.

Part III (chapters 9-10) "School Comes Home: What Can Parents Do?" focuses on situations where children need assistance with their homework and the effects of school impinging on home and family.

Part IV (chapters 11-13) "Literacy Affects the Social Order" draws on examples from Western Samoa, Morocco, and the United States to illustrate how literacy impacts different aspects of the social order.

This section is particularly pertinent to people involved in literacy work in preliterate societies.

Chapter 11 "Literacy Instruction in a Samoan Village" by Alessandro Duranti and Elinor Ochs illustrates the two *socializations* of Samoan children. The primary socialization is consistent with traditional Samoan culture, but the secondary one is primarily western. Literacy, including the way it is taught, is central to the secondary socialization of Samoan children. Rural Samoans acquire literacy to be competent in reading the Bible and to be employable. The emphasis on individual achievement promoted in the school is in conflict to traditional cooperative accomplishment, which poses multiple dilemmas for students.

The book makes evident that the introduction of literacy includes much more than just decoding writing for comprehension.

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EDITORS' PAGE

One of the primary goals of Notes on Literacy is to provide SIL fieldworkers a place to publish scholarly research related to the study of literacy. The most recent issues of NOL reflect this goal. Issue 18.2 included several abstracts of dissertations and theses written by SIL members. This issue includes several book reviews by Spring '92 TXSIL students (with the exception of Sally McNees, who is an SIL veteran). Publication of the abstracts is a reward for the months of hard work of research and writing, and the book reviews are the result of working with an editor to develop skill in scholarly writing. We hope these authors will continue to publish, now that they have started.

Other books are worthy of review, so if you would like to get started publishing, follow the general model of the reviews in this issue and send them in to the editor. Recently published books are best for review because they are probably still in print. If a subscriber to NOL has a thesis or dissertation abstract that has not yet appeared, please send us a copy.

To encourage contributions from more people, we prefer articles 15 pages or less, but will go up to 20 pages when the material warrants special attention. The articles by Stringer and Waters are such articles, having become required reading for the Literacy Materials students here in Dallas.

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

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ISSN 0737-6707

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SOCIAL CONSEQUENCES OF LITERACY IN REPRESENTATIVE ETHNIC GROUPS OF PERUVIAN AMAZONIA

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1. INTRODUCTION

Literacy work among indigenous peoples is controversial since, in itself, it is a kind of intended culture change and results in other changes. Change in one aspect of culture may bring about tensions, problems, and disintegration of a society. On the other hand, as a noted Peruvian anthropologist points out:

> Stress is created when the peoples who have been dominated do not understand the central force of the Western world: writing.
>
> It is therefore important that traditionally illiterate groups learn to read and write. In fact, we believe that written communication is fundamental to a just relationship between different peoples. This is a reality that Peruvian ethnic groups cannot escape: they cannot even initiate a just and fair dialogue with the governing civilization if they do not possess

*We are grateful for many valuable suggestions and data from SIL Peru coworkers Martha Tripp, George Hart, Patricia Davis, Harriet Fields, Martha Jakway, and Betty Snell.

An earlier version of this paper was read at the symposium on Reading and Writing, sponsored by the Research Committee on Sociolinguistics during the X World Congress of Sociology, Mexico, 1982. A Spanish version entitled "Las consecuencias sociales de la alfabetización en algunos grupos étnicos de la Amazonía Peruana" appeared in *Educación intercultural*, ed. by Ågot Bergli, 1990, 67-82. (Comunidades y Culturas Peruanas No. 23). Pucallpa: Instituto Lingüístico de Verano.

this weapon, the most powerful one in the Western world (Ortiz 1981:59-60).

This paper is an attempt to show that Ortiz's position is correct: that indigenous peoples need to be given the option to become literate. After summarizing the historical and social contexts of literacy work in Peruvian Amazonia, some of the consequences of such work among five representative ethnic groups are described. We believe the results are, on balance, positive. Literacy helps indigenous jungle groups maintain their ethnic identity while equipping them to make intelligent choices as they encounter the Peruvian nation and the world.

2. HISTORICAL AND SOCIAL CONTEXT

Most of the ethnic groups of Peruvian Amazonia have had some contact with the Western world for several centuries. Many groups had at least sporadic contacts soon after the arrival of the Spaniards, though these contacts were often hostile and some groups fled into isolation.

> In the present century, since the abuses of the rubber boom until the present, the contacts have accelerated and intensified. The native communities face droves of outsiders: oil explorers, lumber workers, hunters, colonists, merchants, tourists, missionaries, students, etc. (Ribeiro and Wise 1979:15, translation ours).

After the 1940s only about twelve Peruvian ethnic groups remained isolated and, at present, we know of only three without contact with the Western world. According to Varese:

> More than 70% of these minorities maintain permanent relations of interaction with members of the rest of the country. . . 35% (which includes some local groups of those already mentioned) maintain sporadic relations; but directly or indirectly, and to a greater or lesser degree, all of the native societies are linked to the Peruvian economic system (1972:82).

Although the economic base of almost all of the jungle groups is traditional subsistence agriculture, accompanied by hunting and fishing,

> 59 of the 60 groups use metal tools and all except the isolated groups have some other objects which are foreign to their material culture—items like aluminum pots and metal

cutlery, Western-style clothing for many, mosquito netting, and blankets (Wise and Riggle 1981:23).

Obviously, all the groups living in contact with outsiders are going through some degree of culture change.

> Change is normal and inevitable since it is the basic mechanism for cultural adaptation. Every culture is dynamic and is in a constant state of change and development; this can be positive and beneficial when the changes arise from the free choice of the society, which has had various alternatives from which to choose (Loos, Davis, and Wise 1981:355).

One alternative many groups are choosing is literacy. In order to deal with the outside world on its own terms and to receive just prices for their produce and labor, they sense the need to learn reading, writing, and arithmetic.

Prior to 1950, virtually all literacy work in the Peruvian jungle was through government and mission schools. Indigenous people who enrolled in such schools were discouraged from using their own language and were required to learn Spanish, the language of the instructors and materials. Since most were monolingual, very few members of ethnic groups became literate. The few who did nearly always identified with Spanish-speaking people and tended to reject their own language and culture.

In the 1950s and 1960s, a new model for literacy was introduced, with the following features:

1. Insofar as possible, cultural norms for the ethnic group involved are followed in the preparation of materials and in the class room. Typically, adult literacy programs are conducted before involving the children.
2. Learning during the first years of school is in the vernacular, proceeding gradually and systematically to an acquisition of Spanish, taught using a second language acquisition methodology.
3. The Peruvian Ministry of Education developed and has sustained the Program of Bilingual Education of the Jungle, with the Summer Institute of Linguistics (SIL) supporting it mainly in (1) developing materials for the different languages involved, and (2) assisting in teacher training courses, especially in the areas of bilingual methodology, including Spanish as a Second Language.

As a result of this program, thousands have become literate in their own language and in Spanish. The following five sketches describe the consequences of literacy in more detail.

3. AGUARUNA

The Aguaruna number approximately 30,000, and most live along the Upper Marañon River of northern Peru. The majority have had at least sporadic contact with outsiders for many years, but until about 1928, all outsiders were driven out of the area if they attempted to settle there.

The primary Aguaruna social group is the extended family, each of which is led by an *apu*. In addition, there is a well-defined system of kinship-based alliances that allows larger groups to cooperate when disputes, revenge-killings, or intertribal warfare occur.[1]

In the 1940s, before SIL began linguistic studies, some Aguarunas had already identified the need for education, and five young men journeyed to the coast to study. One of these, Daniel Dánduchu, completed primary education there and in 1953 became the first Aguaruna bilingual teacher. Since then, approximately 300 more Aguaruna teachers have been appointed and roughly 7,000 Aguaruna children are attending bilingual schools. The bilingual teachers have also conducted adult literacy campaigns. A five-year formal adult literacy program reached 182 adults in fifteen communities.

We see significant impact from thirty years of literacy work with the Aguaruna. Positive consequences of literacy were demonstrated in the August 1981 conference of *Chapi Shiwag*, one of three Aguaruna geographically-defined organizations. Thirty-one communities each sent two representatives, the president and the secretary of the community. The secretaries were younger men, literate, and bilingual—products of the bilingual schools. They were not the spokesmen for their communities, however. This role was taken by the presidents, all *apus*, the older—usually illiterate and monolingual—traditional leaders.

The Aguaruna organized the conference in order to present some of their felt needs to government officials. First they reviewed Aguaruna programs, highlighting their productivity and progress on special projects. Next they presented the felt needs of the people. At

[1]See Larson (1977) for a more detailed description of this system.

this point, the *apus* asserted themselves, using the typical persuasive style—raised voice, gestures, and long discourses. After each speech, the secretary translated and government officials responded.

This process led to a signed agreement that provided the Aguaruna with government services for their health, education, economic development, and land title needs. Most significant, however, was the fact that the Aguaruna confronted the officials on their terms, in their language, following Aguaruna social patterns. Literacy made the conference possible, but in no way compromised the Aguaruna social structure. Traditional leaders were still the spokesmen, and they related to the officials as equals. The officials left with true respect for the Aguaruna people and their leaders.

Some other general results of literacy among the Aguaruna include:

1. A native literature in Aguaruna is developing.
2. Trained specialists run their own print shop and produce textbooks and literacy materials.
3. A healthy attitude towards their own culture and language has been maintained. Bilingual education is preferred by most Aguarunas.
4. The Aguaruna are able to accept or reject outside influence. Using their literacy skills, they are applying for assistance in some important programs. On the other hand, when a film company was given authority to work in their territory, the Aguaruna launched a public relations campaign against the filming. This, combined with some traditional Aguaruna belligerency, forced the film company to withdraw.
5. Economic status has improved. Cooperatives and associations for transporting and marketing their produce by means of boat and truck have been formed, thus eliminating intermediaries.
6. Primary health services have been brought to thousands through some eighty bilingual health promoters, many of whom were educated in the bilingual schools.

4. AMUESHA (YANESHA')

The Amuesha number at least 8,000 and live in the high jungle in central Peru. Since the first contact in 1635, they have had sporadic contact with outsiders. European colonists settled in their territory in 1858, resulting in permanent contact and many deculturating influences. SIL began linguistic studies in 1947, and informal adult

literacy work started in 1950. In 1953, the first bilingual school began, and by 1976 there were twenty-one teachers in thirteen schools, with approximately six hundred students enrolled. Many adults of fifty-five and under are literate, having attended bilingual schools as children or teen-agers. The Amuesha continue to place high value on education for the children. They take great pride in their children reading to them and in hearing their original compositions.

Although at least seventeen communities have title to some land, the Amuesha continue to struggle to hold what little is left of their traditional territory. Because they live near new roads, in a region earmarked for development by the government, they are pressured in many ways. Throughout their history, when faced with such pressures Amueshas usually moved to more isolated areas. Now, however, they use their literacy skills to take a stand. They learned that they can better resist onslaughts against their society by joining together in the following organizations:

1. The Yanesha' Federation: a conference of indigenous community leaders who meet on a yearly basis. Land problems, education, health, and economic development needs are treated. The federation belongs to an association of several ethnic groups.
2. The Amuesha (Yanesha') Cultural House: this organization has as its goal the preservation of Amuesha culture and history in written form. The work of the Cultural House has included the publication of a newspaper in Amuesha.
3. The Yanesha' Bilingual Education Committee: this group was formed to promote bilingual education. The committee relates to both the regional and national Ministry of Education officials.
4. A coffee cooperative helps to eliminate intermediaries so that the Amuesha earn more profit from their coffee.

The above organizations serve a dual purpose. They help the Amuesha face pressures from outside; at the same time they build and maintain a sense of ethnic identity and pride in their own language and culture.

In addition, a growing body of literature in Amuesha, written by Amueshas, contributes to a strong Amuesha identity.

5. MACHIGUENGA

Some 8,000 Machiguenga live in the southern high jungle of Peru. SIL began work in 1947. Although the illiteracy rate was about ninety-nine percent, a few Machiguenga who had studied in mission

schools were fairly bilingual and literate in Spanish. One of these became the first bilingual teacher when the government bilingual program was introduced in 1954. Today in the twelve Machiguenga villages with schools, virtually everyone between the ages of ten and thirty-five is literate. Parents have discovered a new way to punish their children for wrongdoing: they keep them out of school.

The Machiguenga had sporadic contact with outsiders for centuries. However, the terrain they occupy is rugged and some locations are inaccessible, so there are still Machiguengas who have no contact with outsiders. For the majority, however, literacy has become an important part of their lives. We can trace the effect of literacy in Machiguenga society by comparing former and present ways of handling cash transactions.

Before becoming literate, the Machiguenga lacked a system for counting beyond three. In dealing with merchants, they often just handed over their money and were happy if any was returned. Needless to say, they were exploited. Because of their isolation and lack of literacy, Spanish, and merchandising skills, production of salable produce was almost nil. Initial sales were by extremely small lots, sometimes a handful of peanuts or a few kilos of beans in the bottom of a basket.

Through the literacy program, the Machiguenga learned to count and manage money effectively. Beans, peanuts, coffee, and other crops became a solid economic resource. Gradually, production rose, and with it the Machiguenga developed an infrastructure for marketing their produce directly to the principal buyers. By 1978, their own launch hauled fifteen tons of produce to market at a time, and they bought goods they needed at wholesale prices.

Besides economic improvements, the Machiguenga have moved from being extremely individualistic, suffering without support from their larger community, to where they now join together regularly to solve common problems. Annual meetings are held with most communities represented. Standing committees monitor group projects and accounts. Today the Machiguenga feel pressures of various ideologies, threats, and many other problems. Nevertheless, literate and better informed, they can deal more effectively with these issues. Increasingly they demonstrate tribal unity and readiness to defend Machiguenga society.

6. CHAYAHUITA

The Chayahuita number about 8,000 and live between the Marañon and Huallaga Rivers in northern Peru. They have been in sporadic contact with outsiders for centuries. They were enslaved in the seventeenth century and then served as cargo bearers and peons during the rubber and *barbasco* (a plant used in insecticides) booms. By the 1950s, the *patrón* system was coming to an end among the Chayahuita. However, illiteracy and monolingualism kept them dependent on middlemen, with no access to government services or land titles. They were regularly decimated by epidemics of whooping cough and measles, which sometimes killed twenty-five to fifty percent of the population.

SIL studies among them began in 1952, but were suspended for several years. Adult literacy classes began in 1960. Adult literacy efforts were small-scale, often one-to-one, but important because the traditional leaders were taught to read first. Later, these adult readers became strong supporters of bilingual education.

In 1965, the first bilingual school opened, and by 1975 eight schools were attended by about three hundred students. The Chayahuita bilingual schools endure a number of pressures. Administratively, the area is isolated, and the Ministry of Education is unable to provide close supervision. Taken together with the fact that most Chayahuita bilingual teachers began with minimal ability in Spanish and a minimum of formal education, it can be understood why academic standards have not been high. Other concerns include the difficult experience some Chayahuita teachers have in adjusting to their role as student/teacher, and the adjustments the communities have had to make in relating to the schools. However, even with the least prepared teachers in the least organized of the Chayahuita villages, many students have become literate. Some of the consequences follow:

1. The scope of social relationships has broadened. Chayahuita relationships traditionally involved extended family units, with little or no sense of community, or of being "Chayahuita." Chayahuitas just a few miles away were treated with suspicion or fear. The bilingual schools, along with leadership conferences, literacy campaigns (in several cases one Chayahuita village has taught reading to another, often some distance away), and sports events have brought about more openness to other Chayahuitas. Family

relationships still are primary, but a pan-Chayahuita unity is growing.

2. Loose organizations are forming, though social relationships are still generally horizontal. Because the Chayahuita have seen the need for land titles, personal documents, and education for their children, they have joined informally so that these services could become available. (Certain legal requirements exist for a populace to receive a school or birth register, for example.) Although no formal leadership exists, the government appointed Chayahuitas to certain positions, such as village lieutenant governor. The Chayahuita have adapted a system that meets their needs, without going to a formal model of organization foreign to their culture.
3. Economic independence is increasing. Previously, needed goods could be acquired either by serving a *patrón* or through trade with the middlemen in the village or in the market town. With literacy skills, the Chayahuita sell rice (their chief product) and other items at the full official price. Almost every village has a boat and motor for moving produce and cattle. Sawmill and lumber projects are in progress, and the Chayahuita are exploring new ways to live better.
4. Health services are available through four strategically located health promoters, who provide vaccinations and basic treatment.
5. More subtle, but perhaps most significant, is the improved self-image of the Chayahuita. For years Chayahuita villages on one river sent their children to a nearby monolingual Spanish school. Each year the children returned illiterate, the barrier of Spanish language and culture too high for them to hurdle. After many years of this, the Chayahuita concluded that they were inferior, lacking the capacity to read like Spanish speakers. Then they heard about the bilingual school where a relative was teaching over on a river one day's walk away. One of the boys attended that school for a year; when he returned, he astounded his own people and Spanish speakers by reading to them. Today, hundreds of people from that river are literate.

Although few sensational success stories of literacy among the Chayahuita can be claimed, about twenty percent of the population today is literate and able to handle necessary transactions independently. Furthermore, their children are readers, a revolutionary concept to them.

7. MATSES

The Matsés are a group of about 1,800 (with some 1,200 in Peru) who live in relative isolation. SIL began work with the Matsés in 1969, and literacy work began in 1972. The Matsés formerly practiced female infanticide and found wives through raids among other ethnic groups or Spanish-speaking communities. Consequently, there are a number of women who do not speak the language well and some young people who are slaves.

From the first, the literacy program among the Matsés was adapted to fit the culture (see Fields 1983 and 1990 for more details):

1. The felt needs of the Matsés have been given priority; the literacy program began at the request of the Matsés several years ahead of SIL's initial long-range plan.
2. A heavy emphasis was placed on first teaching the adult men, the traditional leaders. After the men successfully started toward literacy, the people determined that women and children should participate. Now, the classes include a mixture of men, women and children, grouped by progress, sex, and age.
3. A monolingual method was initiated, with no attempt to introduce formal bilingual education until the late 1980s, when a government bilingual school program was modified to meet the Matsés reality.
4. The program centers around the Matsés social organization, based on extended family units living in large communal houses. Thus, there are seven schools with eleven teachers, serving seven communal houses.[2] It is customary for an expert, when making bows and arrows and other implements and utensils, to teach his specialty within each communal house; so the notion of a teacher for each house is appropriate.
5. The classes meet at times of the year and hours of the day convenient with Matsés schedules for hunting, planting, and other tasks.

The Matsés have not faced some of the shocks that most other ethnic groups of Peru encountered. They began their classes convinced that they were a competent people, with a good feeling about their language. (The designs painted on their bodies were already a form of written communication.) They traditionally stay with something until it is learned successfully and pass along

[2]As of April 1992, the number of schools has increased to twenty.

important information to others. The main goal of the literacy effort is to retain these positive characteristics while helping the people learn to read. As a result, approximately fifteen percent of the population are functionally literate.

The future of the Matsés education system is uncertain. The form it takes will depend mostly on how the Matsés desire to relate to pressures already coming upon them. The Peruvian Ministry of Education is flexible in their approach to the Matsés as it provides supervision and financial aid. Based on these realities and experience with other ethnic groups of the jungle, it would seem that the Matsés, now well on their way to becoming a literate society, have a good chance of retaining their ethnic identity.

8. COMPARISONS AND CONCLUSIONS

The comparative chart on the next pages summarizes much of the data given in the preceding sketches and adds some detail. In reviewing the social consequences of literacy among these groups, we conclude:

1. There is an increased sense of ethnic identity and unity among the Aguaruna, the Amuesha, the Chayahuita, and the Machiguenga. This is substantiated by the appearance of organizations serving the entire group and by the development of literature and an improved self-image.[3]
2. In those groups that have had long periods of contact with outsiders, literacy efforts took an approach different from the Matsés, where isolation preserved the identity and self-image of the people.
3. The ability to relate to the pressures of outsiders is essential to the preservation of an ethnic group. All five groups face numerous pressures, but maintain their identity by responding to these pressures using the literacy skills attained in recent years.
4. Although we prefer to see these ethnic groups avoid the pressures of contact with outsiders, one must face the reality: these contacts came, in all but one case, long before SIL work began and the pressures will probably increase. In view of this, we maintain that the social consequences of literacy in the vernacular language and in Spanish are positive.

[3]It is beyond the scope of this paper to describe all of the changes which have taken place in these groups, including the development of indigenous churches and the use of the New Testament translations in the vernacular languages.

COMPARATIVE CHART

Ethnic group	Aguaruna	Amuesha	Machiguenga	Chayahuita	Matsés
Approximate population	30,000	8,000	8,000	8,000	1,800
Year SIL linguistic studies began	1947	1947	1947	1952	1969
SIL literacy work began	1949 (first bilingual school 1953)	1950 (first bilingual school 1953)	1950 (first bilingual school 1954)	1960 (first bilingual school 1965)	1972
Present status of bilingual education*	300 teachers (estimate) 7,000 students (estimate)	21 teachers 600 students (estimate)	17 teachers 600 students (estimate)	8 teachers 300 students (estimate)	Special program with 20 monolingual Matsés teachers
Beginning/Present literacy rate	0.5%/60% (estimate)	2%/60% (estimate)	1%/25% (estimate)	0.5%/20% (estimate)	0%/15%
School materials in the vernacular 1981	Reading 1-12 Math 1-10 Natural & Social Science 1-3 Adult literacy book Dictionary	Reading 1-11 Library 1-9 Math 4-7 Natural & Social Science 1-2 Writing 1-4	Reading 1-11 Math 4-7 Natural & Social Science 1	Reading 1-11 Math 4-7 Natural & Social Science 1-3	Reading 1-4

*Except for the Matsés, the estimates of teachers and students are as of 1982.

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Ethnic group	Aguaruna	Amuesha	Machiguenga	Chayahuita	Matsés
Native writers trained	15 trained in creative writing 5 textbook writers	5 working in Cultural House (many others are trained 2 textbook writers	2	4	-
Native health workers	80 (estimate)	10 (estimate)	9 (have a pharmacy depot)	4	2 (informal)
Indigenous economic development program	Lumber Rice Cacao	Cattle Coffee Rice	2 lumber mills Rice, beans Cattle, coffee Peanuts, cacao 10 stores 2 warehouses	Lumber Lumbermills Cattle Rice, beans Peanuts	Fish pond Some lumber Artifact sales
Land titles	Approx. 75% have titles	17 of 21 have	None (after 1982 some have received titles)	All villages have titles	Have large reserve
Birth registers in community	Approx. 80% have	21 of 21 have	About 60% have	All have (some not current)	-
Marketing, transportation	Many boats Truck Organized to sell goods cooperatively	Coffee cooperative Market cattle direct to buyers	Boats, including a 22-ton launch	Motorized boats in most villages Sell produce direct to the bank	-

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THE EFFECTIVENESS OF SIMPLICITY: A PSYCHOLINGUISTIC APPROACH TO VERNACULAR LITERACY IN A MELANESIAN PRELITERATE SOCIETY

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1. INTRODUCTION

> Reading (*and writing*) is a complex behavior which is one of the functions of language and all language functions are influenced by a large number of intrinsic and extrinsic factors (*e.g., motivational, cultural, cognitive, linguistic, instructional and biological factors*) (Blom 1975:122).

In this paper, I hope to examine approaches that might take advantage of some intrinsic and extrinsic factors that influence the success of vernacular literacy programs. The Psycholinguistic Method adjusts to cultural styles and simplifies traditional formal methods, resulting in greater efficiency. In broad terms, the efficiency of a program is not only measured by literacy skills acquired, but also by the time needed to start up a program, its impact on indigenous self-generating motivation, ease of recruiting and training teachers, flexibility of method, cultural adaptiveness, and minimum need of financial and material resources.

The Umanakaina literacy and numeracy program demonstrates this. Started in May 1989, it has, in just two years, involved 12 villages with more than 300 adults. At least 30 of these preliterate adults have become literate and have shown good fluency and accuracy in spelling. The program is run completely by the local people and will eventually include most of the 24 villages in the language area.

2. BACKGROUND INFORMATION

The Umanakaina language has about 2,400 speakers in a rugged, mountainous area on the mainland of Papua New Guinea in Milne Bay province. Umanakaina is a Papuan language of considerably

complex verb structure. Verb class markers and varying paradigms of tense/person markers contribute to its complexity.

The Umanakaina people have been under the influence of various Christian missions. The Umanakaina want to settle the confusion caused by these conflicting doctrines (mainly communicated in a trade or church language). This has resulted in a high motivation to learn to read the translated scriptures. This factor needs to be taken into account when evaluating the Umanakaina literacy program.

Our target was to encourage an effective literacy program for the whole language group of 24 major villages. Factors we had to take into account were:

1. The difficulty of movement in the mountainous terrain, and inaccessibility during rainy season because of flooding.
2. The low literacy rate in villages that do not have any children attending the community school.
3. A nonanalytical disposition toward problem solving and a strong emphasis on learning through imitation and rote memorization.
4. A life-style of spending great lengths of time in *garden houses* in isolation and usually far from the village.
5. A lack of material resources.
6. The exodus of schooled villagers to the towns for work (e.g., palm oil industry), resulting in an increasing number of villages having no readers.
7. Very few potential literacy teachers have completed grade 6 in the community school. Most have completed grade 4 or less.

Because of the above preconditions, we were naturally attracted to the philosophy behind the psycholinguistic model and the possibility of simplicity in method and application. Our choice of this method was an important factor in making the Umanakaina literacy program successful.

3. THE PSYCHOLINGUISTIC MODEL

There are three sources of information that listeners and readers use as input:

1. *Semantic*: what words refer to in the real world, the hierarchical relationship of words, and their contextual association.
2. *Syntactic*: the ordering relationship among words in sentences.
3. *Graphophonemic*: the symbol-sound relationships, phonic generalizations, and decoding processes.

The Psycholinguistic Model suggests that real reading occurs when all three kinds of information are used in concert. Primary emphasis is given to semantic and syntactic processes in order to minimize graphophonemic analysis. Readers literally predict what is coming and get enough graphophonemic information to verify their predictions. In English, a single letter of a single syllable may be enough information to verify predictions. Therefore maximum use is made of semantic and syntactic information already existing in the reader's knowledge (Pearson 1975:84-87).

According to Frank Smith (1978), the processing capacity of the brain causes a bottleneck at visual information. Words are recognized in context on the basis of significant differences. He stresses that meaningfulness is extremely powerful and can precede identification of words. Smith also states and demonstrates that the same innate ability we use to make sense of spoken language is used in striving to make sense of print.

In the same vein, Don Holdaway states:

> Many of the most complex things we learn, including our native tongue, we master at an early age without formal instruction.
>
> This developmental learning, which often contrasts with school instruction, is so deeply attested to by human experience that it would be unthinkable to condemn it as inefficient or unhealthy (Holdaway 1986:42).

Therefore Holdaway outlines four principles necessary for a teacher to guide this natural process:

1. The *teacher* is to display the genuine utility of the skill in a highly emulative way.
2. The *teacher* must set up an environment (e.g., books) to invite participation.
3. The *teacher* receives learners' cascade of bumbling errors with remarkable tolerance.
4. The *teacher* provides help when requested with very little verbalization but good demonstrations (i.e., noninvasive assistance).

Some psycholinguistic tools include:

1. *Neurological Impress Method*: The teacher tracks words with a finger until students come up to speech speed and learners lead. Rote memory is not discouraged.[1]
2. *Cued reading*: Discussing the passage before reading to help prediction and increase motivation and anticipation.
3. *Repeated reading*: Reading a passage over and over to reduce mistakes and increase fluency and naturalness.
4. *Listening to oral reading*: Learner listens to the story.
5. *Miscue analysis*: Used to classify errors into semantic, syntactic, and graphophonemic categories, and then analyzed to diagnose reading ability and problems and to prescribe corrective action.
6. *Cloze activity*: Evaluates the reading difficulty level of a text in relation to the reader and predictableness.
7. *Conferencing*: Used to improve writing ability to test reading comprehension.

Word attack skills are emphasized by identifying and comparing similar phrases, words, and syllable patterns taken from a meaningful text.

4. THE PSYCHOLINGUISTIC APPROACH APPLIED

Before starting the literacy program, we did two weeks of investigation to determine the most suitable story type for a beginning reader. We found the Creation story from Genesis more suitable for beginners than traditional stories because the Genesis account repeated phrases.

After this investigative phase, we started training teachers by demonstrating the method, with each teacher imitating us. This training was mainly for teaching literacy at a classroom level using charts based on the pages of the primer. Then we tested and finalized writing exercises. Exercises consisted of word games to help recognize common phrases, words and suffixes in that lesson.

With computer image-scanned pictures, stencils, and a dot-matrix printer, we laid out and printed 20 trial primers. Ten adults and seven children (ages 6-10) attended classes for one hour every weekday. Students were motivated enough to read at every opportunity and,

[1]Memorization of a text is not necessarily as mechanical and empty an activity as it may seem. Memorization of books by very young children before they know how to read is common among children who are read to a great deal.

after 3 weeks of classes, they completed the *Creation* primer and went on to another primer based on Genesis stories. Later, we introduced a syllable chart to help improve word attack and spelling skills.

In the three months of trial classes, we saw these students progress well in reading and writing skills. We felt that it was time to introduce the program to surrounding areas. With short, informal teacher training sessions, the program expanded rapidly. Students demonstrated fluent reading skills at an early stage and did not read just by sounding out individual syllables. Each village decided on when to hold classes, which house was best suited for classes, who their teachers should be (if any), and appointed a literacy committee.

Some villages asked teachers from other villages to come one or two days a week to teach from 8 a.m. to 4 p.m. Most villages have classes for one or two full days a week. A recent development is the introduction of regional literacy centers. The lack of teachers and classrooms caused nearby villages (within one hour's walk) to select a central village for combined classes.

4.1 Method

Our desire was to use as simple a method as possible aimed at making meaningful reading its core activity. We wanted the method to demonstrate the process of reading by example, with minimal verbal instruction, and to be flexibly adaptable to cultural learning styles and cultural life styles. The psycholinguistic approach attracted us because it focuses on meaningful reading and learning to read by reading.

We trained the teachers to follow five simple psycholinguistic steps to teach reading at each-one-teach-one and classroom levels:

1. Talk about the story (cued reading).
2. Read through the story (listening to oral reading and display of utility).
3. Read with the learner tracking the words and repeat many times (Neurological Impress Method and repeated readings).
4. Discuss the story (conferencing to check comprehension).
5. Do word attack writing exercises.

Another component of the method was the syllable chart. Teachers demonstrated how words from the story were made up of syllables. The chart was taught gradually, covering 2 or 3 consonants at a time. The introduction of the syllable chart brought in syllable games based on the meaningful text and helped those who were able

to *see* syllables move ahead in word attack skills. Because students saw why syllables helped them read meaningfully from the start, they were motivated to work at memorizing and identifying syllables.

Teachers divided their time equally between story reading and word attack games using the syllable chart. Writing exercises were designed to be self-explanatory, so teachers could easily guide students until students independently picked up graphic cues from the page.

4.2. Motivation

This meaning-based approach to teaching reading worked so well that we were initially startled at the students' enthusiasm. From the first day, they felt they were reading, ensuring their attendance and punctuality. At night, we heard reading going on in almost every house.

The excitement of reading meaningful text at an early stage led students to advertise the program. Relatives in other villages requested the primer from people passing through. The program expanded rapidly to other villages.

Another boost to motivation happened when faster students began to help the slower ones. This made the fast readers feel that they were already using their skills for a worthwhile cause. It also satisfied their cultural tendency to have everyone progress at the same rate.

This approach motivated people to practice writing skills. Without formal instruction, students copied whole pages of the story on any available space in their books or on scrap paper.

The level of motivation was directly related to the amount of meaningful reading done at each session. Class sessions with too much focus on teaching the syllable chart produced boredom. After losing attention during the lesson, many began to read their own books privately.

4.3. Reading strategies

Memorization. Students used their cultural tradition of learning by rote to help them remember the story and identify words and phrases. Sometimes we wondered if they depended only on memorization without reference to print. One night, however, we noticed a middle-aged woman trying to recite a page of the reading book. She was unsuccessful until she referred to her reading book and used the print to complete the story correctly. This showed print to play a part in

her process of reading, though she used memorization to a great extent. This student quickly became a fluent reader and good writer.

Prediction. The main reading strategy used by students reading for meaning was prediction. Students predict the succeeding word using their syntactic and semantic knowledge of the language.

Self-correction. Students are encouraged to use self-correction as a reading strategy. Students left alone by the teacher usually back-tracked and corrected mistakes. Teacher intervention was helpful only when a student requested help in identifying a word.

Syllable identification. When a student asked for help identifying a certain word, we sounded out only the first syllable. This was usually sufficient if the material was syntactically accurate. This showed that they need to recognize only certain syllables to identify a word if they were predicting, reading for meaning, and the text was not too difficult. The only instance when they needed to identify all syllables was when they encountered new and difficult words or text that had a low level of predictability.

4.4. A one-track approach

The above observations suggest that students will always choose to read for meaning. They will resort to other strategies only when prediction fails. Therefore, there is no need to have two separate tracks (one emphasizing reading for meaning and another emphasizing word building, known as the story track and the workbook track in the Multi-Strategy Method).

We have not encountered any confusion caused by merging the two tracks. Teachers think it is sensible that in the same class session they can show how the story is made of smaller units, making the story the basis for word attack games.

4.5. The dialect factor

The program was later introduced easily to villages that speak a minor dialect that consists of two subdialects. The percentages for noncognates (phonological and nonphonological) are:

Main Dialect

21.1% 25.9%

Dialect A 4.1% Dialect B

These differences did not affect the enthusiasm for the literacy classes in the minor dialect area. With minimum supervision, the classes progressed well, with about 15 to 25 people becoming fluent readers.

4.6. Attrition and absenteeism

The attrition rate was very low because everyone felt they were reading because they used rote memory to a great extent. They had no loss of confidence because they could simply track the words and recite the story, and hence feel fully engaged in the reading activity. No one felt like a failure or was shamed because of a lack of analytical skills (which is necessary if reading is done solely by word building through the recognition of syllables). The most *syllable blind* student will not drop out easily, and will eventually read by whole word identification.

Like all village-based literacy programs, we have long term absentees because of sickness, visiting sick relatives, or cultural obligations, but most returned and eventually caught up. An example of this is an old man who was absent for two weeks due to visiting relatives. When he returned, the other students had already started reading a new book and were reading the final consonants of the syllable chart. To our surprise, two weeks after his return he could identify 70% of the syllables without prompting!

4.7. Teacher training and materials

Anyone who can read can be a teacher. Even slow readers can practice with a primer and then help someone later. There are no high requirements; teachers can be those who have had little or no formal schooling.

Formal teacher training was very short, about one hour at the most because the primer is based on repetitive, but meaning-oriented reading with self-explanatory writing exercises. A teacher needs to give only minimum verbal instruction to the student because learning is based mainly on observation and imitation (a common cultural learning style).

Informal teacher training occurred when potential teachers watched trained teachers teach. These later imitated a trained teacher and taught at the classroom level.

Materials needed for teachers to start literacy classes were minimal. Primers, pencils, a sharpener, a few large erasers, and enlarged pages of the primer make the list.

4.8. Literacy materials that create a reading environment

We wanted primers to lead through graded materials that will help the reader handle more difficult material where predictability is lower. We designed a series of three primers. The first is based on the first chapters of Genesis, which has many repetitive phrases and words. The second primer has short narrative portions from the New Testament, and the third primer contains more difficult portions of the New Testament.

When primers and other materials meet a felt need, they create interest and motivation for a literacy program and demonstrate the utility of reading. The books we have distributed include:

1. A book of 82 Umanakaina songs.
2. A graphic panorama of the Bible (Genesis to Revelation in picture form with appropriate vernacular explanation).
3. The complete Anglican service book with songs.
4. A story book with 100 local stories (compiled after a writers' workshop in December 1990 at which 98 people participated--of which 45 were literate).
5. A numeracy book designed with help from the community school staff.
6. A series of 5 medical booklets on the treatment of common diseases.

These materials helped create a reading environment that generated interest and helped meet felt needs.

5. CONCLUSION

Motivation is vital to any literacy program. To use people's natural ability and apply it to predictable and meaningful text results in an immediate sense of achievement and increases motivation to read. This follows the important principle of moving from the known to the unknown by making maximum use of semantic and syntactic knowledge.

The Umanakaina program is a good example of how a method based on psycholinguistic approaches to reading can be effective, yet simple to adapt to cultural patterns and an isolated situation. In just two years, the program has become fully indigenous, making it

possible for us to move on to another language group. Using the psycholinguistic approach for vernacular literacy simplifies the effort in terms of time, manpower, and finances.

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"GRAMMATICAL TONE" AND ORTHOGRAPHY

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1. INTRODUCTION

Occasionally I am asked for my opinion on how tone should be represented orthographically. Since orthographical concerns are often intertwined with emotions, I have tried to avoid the issue as much as possible. Recently, however, I decided to take a more active stance.

When establishing an orthography, one *ideal* is orthographic representations based on the principle of *one form, one meaning*. By adopting this principle, a constant word-image[1] (or sometimes morpheme-image) is maintained in which each word has a representation that is both unique and consistent. Tone systems offer a serious challenge to this ideal. The problems are not insurmountable, however, and I conclude that maintaining a constant word-image is both desirable and attainable.

2. TONE SYSTEMS

It is generally agreed that tonal languages have certain characteristics. They have a limited set of tonal melodies associated with the underlying forms of morphemes (e.g., H (high), L (low), HL and LH). Which melody is associated with which morpheme is unpredictable. Consider the following examples from Chumburung, a Kwa language spoken in Ghana. Chumburung has two underlying

*I thank the following people for kindly taking the time to comment on previous versions of this paper: Mike Cahill, Rod Casali, John Daly, Connie Kutsch Lojenga, Eugene Loos, Eunice Pike, Thilo Schadeberg, and Ursula Wiesemann.

[1] My thanks to Connie Kutsch Lojenga for bringing this term to my attention.

pitch levels, H and L, and these combine to yield the four underlying tonal melodies below.

(1) Stem Melody	Surface Form	Gloss
H	kpáŋŋá	'horse'
L	sànnì	'sheep'
H L	câŋ	'guinea fowl'
L H	kə̀nní	'elephant'

Most often, a tone language has at least a few minimal pairs distinguished solely by tonal differences. In Chumburung, for instance, the first person singular and third person singular possessive forms are a minimal pair.

(2) mí ká 'my wife' mì ká 'his wife'

The use of pitch phenomena to distinguish meaning is not restricted to *tone* languages. In English, for instance, intonation plays a significant role in distinguishing meaning. The difference between a statement and a yes/no question is often only intonational. One way to make intonation languages, like English, more readily comparable to tone languages, like Chumburung, is to realize that both types of languages use contrasting tonal melodies. The main difference between the two typologies is the grammatical level spanned by the melody--morphemes in the case of tone languages, and phrases in the case of intonation languages. The difference between the two typologies becomes even less when one considers that many tonal languages also have "*grammatical* tone".

In languages with grammatical tone, certain grammatical constructions are distinguished solely by differences in tone. Sometimes, for instance, the difference between clauses with perfective aspect and those with imperfective aspect, or between those with recent past tense and those with distant past tense, is indicated solely by tonal differences. Viewed in this way, contrastive tonal melodies associated with certain grammatical constructions in tonal languages are not unlike contrastive tonal melodies associated with certain grammatical constructions in intonation languages. To better appreciate how grammatical tone works, consider how such a construction *sometimes* arises, historically.

It is well known that tones influence one another, giving rise to what is often called *tone sandhi*. At times, the presence of a single tone can cause extensive and sometimes far-reaching changes to its environment. In a given construction the tone of a certain particle

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causes changes to occur to the tones surrounding it. In time, the tonal changes that occur to the surrounding tones are indicative of the grammatical distinction signified by the particle. The particle that originally caused the tonal change is then no longer needed to maintain the grammatical distinction. The particle drops out but leaves its tone behind in the form of a *floating* tone that continues to exert its influence on its environment. The semantic load is now borne solely by the changed tonal melody of the remainder of the construction.

We turn our attention at this point to a case of grammatical tone, the imperative construction in Chumburung. This construction is better understood when one has a grasp of the relevant facts of tone sandhi in the language.

Chumburung has a rule of H-Spread in which a word-final H tone *spreads* across a word boundary to a following word that begins with a L tone. This results in the first tone-bearing unit (TBU) of the second word being pronounced with a H tone. In the following examples, word-level tones are indicated beneath their respective words in order to be able to represent phonetic pitch above.

(3) [¯ ¯ _] [_ _]
mɪ jono 'my dog' cf. jono 'dog'
H L L

Chumburung also has a rule of Downstep in which a L tone, whether floating or otherwise, lowers the tonal register for the remainder of the phrase. Consequently, a H tone that follows a L tone is realized at a lower pitch level than a H tone that precedes the L tone.

(4) [¯ ¯ _ _ - -] [_ - -]
mɪ jono kɪsɪbɔ 'my dog's ear' cf. kɪsɪbɔ 'ear'
H L L H L H

I analyze the imperative construction in Chumburung as being characterized by a floating L tone (circled in the examples) that precedes the verb. In the following examples, the imperative negative construction is distinguished from the imperfective negative construction solely by the effects of this floating L on its tonal environment. Examples (5) and (6) involve a H-toned verb. In (6) the presence of the floating L tone can be seen to have conditioned the occurrence of Downstep.

(5) [¯ - - - - - - -]

naatɩ ma yɔ mɩ kɷdɔ-rɔ '(The) cow won't go to my farm.'
H H H H H L
cow neg. go my farm-loc.

(6) [‾‾ - - - - - - _]
naatɩ ma yɔ mɩ kɷdɔ-rɔ 'Cow, don't go to my farm.'
H H L H H H L
cow neg. imp. go my farm-loc.

Examples (7) and (8) involve a L-toned verb. In (7) the presence of the L tone associated with *ba* 'to come' conditions the occurrence of Downstep with respect to the phrases that follow it. In addition, the word *ba* itself undergoes H-Spread since it is pronounced at the same pitch as the preceding H-toned word.

(7) [‾‾ - - - - - -]
naatɩ ma ba mɩ kɷdɔ-rɔ̄ '(The) cow won't come to my farm.'
H H L H H L
cow neg. come my farm-loc.

(8) [‾‾ - - _ - - -]
naatɩ ma ba mɩ kɷdɔ̄-rɔ 'Cow, don't come to my farm.'
H H L L H H L
cow neg. imp. come my farm-loc

Notice in (8) that H-Spread does not occur across word boundaries when the L tone is preceded by a floating L tone.

3. THE PROBLEM

The problem of how to orthographically represent the grammatical differences discussed immediately above is that the tonal distinctions that identify a particular construction differ from context to context. The presence of the imperative, for example, is *marked* by the downstepping of a H-toned verb in one context, and by the failure of a L-toned verb to undergo H-Spread in another context. I have observed that in practical orthographies, the principle of *one form, one meaning* is often abandoned in favor of a surface representation. Consequently, the tones of words and morphemes are represented differently from one construction to the next, and the reader is forced to *sound out* each construction to ascertain its meaning.

Obviously, any orthography that employs a surface representation for grammatical constructions identified solely by tonal distinctions confronts the ideal of *one form, one meaning* in two ways. First, identical words would receive different representations in constructions

that tonally form minimal pairs. In examples (5) and (6) above, the verb *yɔ* 'to go' would be represented by a H tone in the first construction and by a downstepped H tone in the second. Similarly, in examples (7) and (8), the verb *ba* 'to come' would be represented by a H tone in the first construction and by a L tone in the second. Second, identical grammatical constructions would receive different representations in environments that differ tonally. As pointed out above, the imperative construction would be represented by the downstepping of the tonal register in the case of H-toned verbs, and by the failure of H-Spread to occur in the case of L-toned verbs. The reason many turn to a surface representation at this point is that if each word in these constructions receives a consistent orthographic representation, representing the grammatical constructions in a consistent manner is difficult.

I believe that abandoning the principle of maintaining a constant word-image for the orthographic representation of tone does a great disservice to both readers and writers of the languages involved. For the beginning reader, the visual medium stimulates the oral medium, and this conveys meaning. For the mature reader, however, the visual medium conveys the meaning directly, and one reads by sight rather than by sounding out each utterance. In other words, the mature reader skips a step and therefore can read much faster. A good orthography does not deny the mature reader this privilege.[2]

Imagine the disservice to English readers if we were forced to sound out the intonation melody of an utterance by means of a string of numbers, or some such device to determine whether the utterance is a statement or a question. Fortunately for us, those who developed our English orthography were more practical and came up with punctuation marks and upper and lower case letters to represent information conveyed suprasegmentally. When reading what would otherwise be ambiguously a statement or a question, a question mark at the end of a sentence conveys to the reader that this is a question, and when reading it orally he gives the utterance the proper intonation. Use of the question mark skips the oral medium and directly conveys meaning to the reader. Any hindrance to the

[2]It is always difficult to meet the needs of both beginning and mature readers with the same orthography. Nevertheless, I believe orthographies should always be developed with the mature reader in mind. The success of literacy in the English language despite its orthography attests to the possibility of success.

beginning reader is minimal and the help to the mature reader is maximal.

4. A SOLUTION[3]

For languages that have grammatical constructions indicated solely by tone, why not mark those constructions in a unique way, much the same as a question mark signifies a question sentence in English? If there are only tonal differences between, say, perfective aspect and imperfective aspect, one could mark the verb of one in a unique manner. Assuming it were decided to represent lexical tone with conventional tone marks in Chumburung, the imperative construction could be indicated in another way. In (9), the verb of the imperative construction is preceded by a single quotation mark. Alternatively, another mark could be used before or after the verb, or the verb itself could be underlined. The point is not which mark is better or worse, but rather that there be some indicator that consistently represents a given construction early enough in the sentence to convey the correct meaning.[4]

(9) Naatɪ ma yɔ mɪ kɷdɔrɔ̀. '(The) cow won't go to my farm.'
Naatɪ ma 'yɔ mɪ kɷdɔrɔ̀. 'Cow, don't go to my farm.'
Naatɪ ma bà mɪ kɷdɔrɔ̀. '(The) cow won't come to my farm.'
Naatɪ ma 'bà mɪ kɷdɔrɔ̀. 'Cow, don't come to my farm.'

By adopting a *double system* of orthographic representation, both lexical words and grammatical constructions can have unique and consistent representation, and the needs of both beginning and mature readers can be met.

[3]This solution is not original with me. Several SIL teams have employed it in their development of orthographies. These include Elaine Thomas for Engenni in Nigeria and Iver Larsen for Sabaot in Kenya (Connie Kutsch Lojenga, personal communication). Unfortunately, it has not met with widespread usage.

[4]For the purpose of clarity, I have opted to mark only L tones because they occur less frequently than H's in the following examples.

LITERACY AND DEVELOPMENT—AN INQUIRY

Clinton Robinson

Clinton Robinson and his wife Mollie worked on the Nugunu language project of the Cameroon/Chad branch, and was later branch director. Clinton recently completed a Ph.D. at Reading University in the UK in sociolinguistics on the use of languages in rural development. Among other things, he currently represents SIL to international development and education-related organizations.

1. INTRODUCTION

Wherever socioeconomic development is pursued, the question of education and knowledge is raised. Literacy as a basic tool is frequently seen as the first rung on the educational ladder, offering access to wider opportunities and improvement in the quality of life. The relationship between literacy and development is therefore of interest both to national planners and to local practitioners. If the impact of development is ultimately to be felt by people in local communities, then literacy practitioners at the grassroots level particularly need to understand how the two activities may be brought together.

At first glance, a relationship between literacy and development is easily established on the basis of worldwide indicators. The International Task Force on Literacy presented an illiteracy rate of 48.9% for women and 27.9% for men in developing countries, as against 2.6% for women and 1.7% for men in developed countries (ITFL 1990). Other literacy-related indicators, such as the number of book titles published and newspapers available, strengthen the impression that there must be a link between literacy and development. However, such stark figures, telling as they are, mask basic questions. Attempts to show whether increased literacy facilitates development, or vice versa, have demonstrated how complex and contradictory the relationship is (IBE 1990). It is therefore essential to ask *what kind of development* is being promoted and *what use* is expected to be made of *literacy* within that particular development paradigm.

Before examining those questions, three related perceptions in the literacy-development debate must be borne in mind. These are not necessarily contradictory (though they may be), but are possible

starting points in the debate. They need to be made explicit at the outset, so different colored spectacles are recognized.

First, the debate may focus on development as the *context* of literacy. Where literacy is seen primarily as the acquisition of skills, these may be obtained by people in any environment, developed or developing. Such a perception may seek to adapt methods and materials to the context of the developing country, but leaves open the question of how such literacy will foster development. This lack of linkage was noted by Cairns (1987) in his evaluation of SIL adult literacy programs in Cameroon. Second, development may be seen as the *content* of literacy materials. Messages and ideas designed to increase capacity in, for instance, health, farming, or income generation are offered to new literates with the expectation that they will be able to apply the benefits of such new knowledge. Functional literacy is based on such an approach (UNESCO/UNDP 1976). Third, literacy may be seen as development in itself. This perception sees the skills and uses of literacy as part of a wider educational *process of development*. The very acquisition of literacy, the relationship of learner and animator become part of the search for what literacy and development mean for a group of people in a particular sociocultural context. Freire sought to develop this approach as he made conscientization the goal of the literacy process.

Whatever initial perceptions we may have, it is clear that all three—context, content, and process—impinge on how literacy relates to development and therefore beg the question of what the aim of development is. In general terms, this paper presents a view of literacy whose acquisition and use are seen as a step toward greater awareness of oneself and of the surrounding world. This in turn is set in the context of development centered on participation, communication, and human relationships.

2. WHAT IS DEVELOPMENT?

The term "development" is itself problematic since it implies the opposite, "undevelopment" or "underdevelopment." A person can hardly be said to be more developed than another as each has the capacity to relate, communicate, learn, and grow. This is important as the tendency to classify the world into developed and developing easily colors attitudes to people as well. There are, of course, huge differences in the opportunity to realize and express human potential, and it is here that the terms "developed" and "developing" may be

appropriately used. The disparities are essentially economic, political, social, and educational—and all of these constrain cultural expression. An unfortunate and often implicit assumption has been that some *cultures* are more developed than others, with identities, cultures, and languages relegated to the underdeveloped category. This is plainly not the case, as each community organizes and perceives itself in ways internally valid and consistent. Again, this is obvious but important as an indication of the way the term "developed" is frequently defined according to Western/Northern perceptions.

The two most prevalent development models in the past 30 years have both suffered from this narrow perspective. On one hand, modernization saw the West as the model developing countries should aim at primarily through industrialization and the transfer of the knowledge and technology of the North. On the other hand, dependency theory identified the cause of much underdevelopment in the unequal relationships of the South with the North and proposed structural change in societal relationships as a way forward. Such changes must be operated at every level, but particularly at macro (national and international) levels where inequalities and exploitation are most evident (at least to the outside observer). Both models emphasize the nation-state as the basic unit at which development should be organized, and as such, betray their roots in a capitalist and socialist view of society respectively (Long 1977). Neither model has succeeded in breaking the cycle of poverty, though the structural insights associated with dependency theory have indicated some latent causes of it. Neither model has moved initiative into the hands of those most concerned by their plight—the local populations, rural and urban, of the so-called developing world. As a result neither has given attention to local culture as a significant parameter in the design of development intervention (Maiava 1988).

The early 1990s have witnessed the predominance if not of the capitalist model, then at least of the role of market forces in the economic arena. The collapse of centralist regimes in Eastern Europe is testimony to this. As market forces are also increasingly applied to the developing world as solutions to poverty and other problems, the question needs to be asked how far such principles can be applied to deprived and marginalized sectors of the population, and particularly to the promotion of an educational process among such groups. While the accompanying democratization movement, particularly in Africa, shows promise for the increased visibility of minority groups and respect for their identity, such a movement could be jeopardized

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by a reliance on market forces where the poor and powerless are further deprived.

In the light of these global trends, it is all the more important consciously to choose and promote a model of development that puts people at the center. For the literacy practitioner, such trends form the larger policy context that constrains and opens up possibilities for local action. Changes of emphasis at the global level do impact local people through their governments and other agencies, but the positive potential of such changes needs to be carefully thought through before appropriate new action at the grassroots level can bear fruit. The democratization movement, for example, ought to bring new opportunities for initiative, self-expression, and people's organizations; *how* this may be best achieved in a particular sociocultural environment will vary and requires positive reflection and debate in the local community, and with (self-)aware change agents and animators.

In terms of an emerging development model, it is only by putting local communities at the heart of the development process that the new world climate will offer people any more hope than previous decades. As the recent South Commission put it:

> . . . development is a process which enables human beings to realize their potential, build self-confidence, and lead lives of dignity and fulfillment. (South Commission 1990:10).

Such a view sees the problem of underdevelopment above all as a matter of social relationships and of control over one's own destiny. It does not give pride of place to economic considerations, though these will be important sectors of activity and indicators of development (Ghai 1988). The process of development is, as Haque et al (1977) argued, an "enhancement of personality" where the crucial issues are "distinct identity, self-confidence, creative ability, an ability to face the world with purpose, poise and pride" (p. 15).

If such lofty goals are to be more than empty words, then those who are least self-confident, most deprived, and marginalized must become the beneficiaries of development intervention. Chambers (1984) argued that much development intervention has in fact contrived to conceal rural poverty and to ignore those sections of rural populations that are the poorest, e.g., remote groups, women, the unschooled, linguistic and ethnic minorities. An approach that has received a great deal of attention in recent years has emphasized the

empowerment of such groups through their increased participation in development processes (Bhasin 1976, Rahman 1987).

A participatory approach identifies the problem of deprivation as one of social structure. This not only addresses the more obvious inequities, such as the relationship of colonies to their colonial power, but also recognizes the fact that there are exploitative relationships within rural societies (Chambers 1984). This is true, for instance, in the African context, even though the alienating influence of foreign models at the macro level is frequently foregrounded as a development problem (Ngoupande 1988). In order to promote the well-being and full development of human potential, strategies are adopted that will enable powerless (underdeveloped, deprived, exploited, minority, oppressed) communities not only to express their needs but also to achieve enough bargaining power in the wider society to obtain resources to meet their needs. This very process of empowerment is frequently seen as the most important and urgent need to which other kinds of more traditional interventions contribute and are subordinated. Similarly, participation becomes not merely a means towards an end, but also a goal, since full participation of the local population is an expression of the fact that the community is in charge of its own development. Participation in particular interventions or projects is not the ultimate aim, but in fact contributes to the community's capacity to mobilize and use its human resources to the full.

> Participation (is) the *fundamental dynamic* of the project. In such projects, and whatever the specific objectives, the whole approach is participatory. An emphasis on less technical activities is apparent in these projects and there is often a much stronger educational element. (Oakley 1991:160)

This educational element builds on Freire's notion of conscientization as a means of creating awareness of the underlying sociostructural causes of underdevelopment. Self-sustaining development can only come about where the full participation of local people is a goal and where this is manifested by awareness-building dialogue with and between the villagers.

A participatory approach to development puts responsibility for development into the hands of local people and input from outside is structured to further that process. Communication becomes therefore the basis of that process—between local people themselves and between the local community and those providing stimulus and

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support from outside (Mister 1988). Communication refers here to the process of interaction between people, and not primarily to the means of communication (cf. Savio 1990). In studying development, many have assessed the usefulness of various forms of mass media in the transmission of information to rural populations. Such concerns may be important at the macro (national or international) level (cf. South Commission 1990) but they do not address the quality of interaction at the grassroots level. This is not to exclude the mass media from rural development intervention. However, a participatory approach cannot ultimately treat people in the mass, since the aim is to stimulate individuals and groups of individuals to respond to their own needs with their own potential. This means that communication for such purposes must essentially be face-to-face between the facilitator and the local people:

> The reversal of roles is profound. It means that the great bulk of all development communication that can carry through to *end-use* at the community level must be done on the ground in group settings. (Childers 1990:9)

Such a view of development requires—and makes sense of—an approach involving long-term commitment to the development of human resources at the grassroots level. It also requires that communication take place on the terms of the local people—within *their* social, cultural, and linguistic context. The implications for designing literacy programs are clear—local responsibility, local material, local language. Such have been the guiding principles of much of SIL's literacy work. The question remains, however: What place does literacy have in the context of a development process that is people-centered, participatory, and based on communication?

3. WHAT USE IS LITERACY?

Development depends on many social and economic factors—most of which relate to the distribution of power and resources. Literacy is one of the tools of communication that can serve development purposes. Rather than asking what the nature of this tool is, it needs to be established what it may be used for. Where development intervention starts with a local community, the use of literacy will be defined within the local culture. This will entail an investigation of communication patterns and of the role of written communication specifically. As Street (1990) argues, what literacy means will vary in differing social contexts. Many minority communities in Africa, for

example, overwhelmingly use oral communication for their everyday needs, while written communication is reserved for interaction with government authorities and other official bodies. The absence of written communication within the local community is therefore not due to unfamiliarity with literacy as such, but may be due to cultural and linguistic factors. The potential uses of literacy in such circumstances must be determined by the need to express, as well as to receive, messages and ideas.

A major problem in literacy comes when the language of the only written materials available is not understood by the majority of the community. However, the introduction of local-language literacy may not in itself be the solution. There are two questions as far as development intervention is concerned: First, how much is the local language used in development communication? Second, how much is the written medium used in any language? Where the answer to the second question is negative, literacy must be treated as an innovation that, when shown to be viable, can help meet some of the community's communication needs and introduce hitherto undiscovered possibilities. The introduction of local-language literacy in a multilingual environment must provide possibilities for the written use of each language for different purposes and in varying proportions by different sections of community.

Literacy is both social and individual. At one level, literacy is undoubtedly an individual skill. As such it can be exercised by the individual to facilitate advancement in society in competition with others. However, the social environment determines to a large extent the uses to which literacy is put and controls access to literacy through the educational system. Thus the individual skill is always used in a particular sociocultural environment; so it is essential to understand how the environment conditions the acquisition and use of literacy where it is introduced as an innovation.

The same relationship of the individual and social levels can be applied to development. Individuals may pursue their own development, but can only do so within the possibilities available within society. It was this relationship between the individual and the social that Freire (1973) sought to call into question through literacy. Literacy was seen as a means of apprehending and structuring reality (conscientization), thereby questioning the social structures that limit learning and development. For Freire, literacy was intimately related to development—indeed some of his analysis of educational models

was based on his experience of agricultural extension services in Brazil. The learning of reading and writing was used as an opportunity to identify and "problematize" oppressive social structures, such as the large and powerful landowners in Latin America. In this framework, literacy is seen as an aspect of power distribution. Promoting literacy among the disadvantaged has the purpose of increasing their bargaining skills and therefore their power vis-à-vis exploitative structures and people. The ideological links with the dependency model of development are plain.

Pursuing Freire's notion of conscientization, Lankshear and Lawler (1987) went so far as to say that the only "proper literacy" is the development and exercise of critical consciousness in the ongoing power struggle of society. At this point, the use of the term "literacy" seems overworked and leads into diverse kinds of social action. However, there is no doubt that literacy as a communication tool can empower people where they face unequal power structures.

Such reflections move away from a purely functional view of literacy where a community is prepared through literacy to receive certain messages offered by those with the means to produce them—such agencies might be government, development, church, or political party. If literacy is seen as a communication tool, then writing must receive as much attention as reading—people must be as able to express their own cultural heritage and views on the world as they are to receive those of others. The transmission of new ideas frequently associated with literacy in marginalized communities has its place, but must be perceived as part of a cultural exchange and mutual learning process. Existing ideas, particularly in the agricultural sector, have been shown to be as valid as new ones introduced from outside, and they are a better starting point for innovation.

There is no basis in a people-centered model of development for using literacy for the one-way transmission of ideas and knowledge. In defining what use literacy is, the perspective of the local community must be sought, and this must structure the literacy practitioner's activity—in material preparation, pedagogical approach and above all, in relationships. There is no general answer to the question: What use is literacy in development? Asking the question leads to further questions about the sociocultural context in which literacy is promoted. Literacy therefore has various faces, or to use Street's (1990) terminology, there is not one literacy but several "literacies"—

each defined by the uses individuals and communities make or wish to make of reading and writing.

4. LITERACY (AND DEVELOPMENT) AS PROCESS

The notion of several literacies defocuses outcomes. It becomes impossible to define what literateness is, including the skill level required outside of the context in which the literacy is to be organized and used. Literacy can be best seen as a *process* whose structure is as important as its results. If this is so, then the results will depend on the process. The uses to which literacy may later be put depend on the way it has been acquired. This puts the literacy process squarely in the field of relationships; what is modeled between learner(s) and animator(s) becomes a pattern. The way literacy practitioners go about their task becomes central.

It is here that literacy and development very definitely meet. Development is also about relationships—of the kind that foster dialogue, negotiation, mutual respect, and equity. Whatever the level of skill acquired, literacy can be deemed to have led to a successful outcome where it empowers people to make dialogue (in written form specifically) a basic and permanent strategy in their relationships. Moving toward this outcome has implications for the learning process and for the animator.

The learning process will be characterized by an emphasis on what the learners have to say and, therefore, to write. Self-expression will have priority over the consumption of pre-packaged messages, and pedagogical materials will be rooted in the local culture. Producing and reading such materials is an important aspect of building self-confidence and cultural self-esteem. Where minority groups have long been used to consuming messages packaged in other cultures and languages, such self-esteem may be largely eroded and a feeling of cultural inferiority may have developed. It is on the basis of restored self-esteem that new ideas can be introduced, not as something to be unquestioningly adopted, but as an element to be creatively confronted with local reality.

Literacy acquisition will be a process of interaction and mutual learning. It is important that a climate of open and equal exchange be established between the animator and the learner(s). Learning is not a matter of absorbing information—Freire's banking system of education—but of dialogue:

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> . . . since dialogue is the encounter in which the united reflection and action of the dialoguers are addressed to the world which is to be transformed and humanized, this dialogue cannot be reduced to the act of one person's "depositing" ideas in another, nor can it become a simple exchange of ideas to be "consumed" by the participants in the discussion. (Freire 1972:61)

The animator will then be as eager to learn as to teach, and will base pedagogical method on shared discovery and insight. Freire spells out the love, faith, humility, and trust that such an approach demands.

Such dialogue in the literacy process will counter the attitudes mentioned earlier toward "developed" and "underdeveloped" cultures. Since the process addresses local cultural realities, those realities themselves are shown to be of value and as instructive and meaningful as those of any other culture. Where the animator represents a different socio-cultural background, the dialogue will engender a creative cultural debate.

What has such a literacy process got to do with development? At this point, we can say that the literacy process *is* development of the type defined earlier—where people control the process that promotes the participation of all and that sets communication at its center. Development projects of the traditional kind (poultry, wells, clinics, etc.) may well accompany or grow out of such a process; indeed, they will strengthen the process of self-confident participation, but they will not be the finality of development.

The mere capacity to read and write will not in itself bring about development of any kind. The *use* of that capacity is crucial—and so the development purposes for which reading and writing are used become the central determining factor. The literacy process can become part of those purposes where it shares the same goals. Where literacy differs from, or ignores development goals, it will at best create a limited readership of certain prepared messages and, at worst, show reading and writing to be irrelevant. Literacy practitioners adopting a people-centered process may face a hostile policy environment, for example, where institutions or governments seek to control the development process tightly. In such circumstances, the exercise of a growing local capacity to take charge of their own development may have limited scope; however, at least the ground will be prepared through the promotion of the self-confidence and

equitable relationships without which human development ultimately cannot proceed.

5. SOME IMPLICATIONS

I have sought to highlight some general principles in the relationship between literacy and development, and to show that what may be observed on a macro (national, international) level affects what happens at the micro (community, village) level. What are the implications for the literacy practitioner?

Awareness of the local, national, and global context of development and literacy activity is crucial. It will determine the perspective that the literacy practitioner brings to his or her work. The larger context also shapes the possibilities and constraints on development and the use of literacy in local communities.

The basis for literacy promotion is the relationships the literacy practitioner forms. These will determine how local initiative and responsibility develop, and will affect the pedagogical method. Relationships are more determining than any technical aspect of the literacy task.

Communication patterns—oral and written and in what languages—must be investigated to understand how written communication will serve the community. This will involve identifying and relating also to all the local actors on the development stage. As literacy becomes a viable means of communication, there must be ongoing sensitivity to new needs that may emerge.

The viability of literacy must be demonstrated. This may be a problem of lack of confidence in the ability to learn to read or a belief that a particular language is unsuitable for the written medium. Showing people that literacy is possible will be based as much on the practitioner's relationships as on technical success.

The literacy practitioner must monitor the social and political implications of literacy promotion and make them the subject of ongoing dialogue with the community. In a dynamic environment of this kind the role of the practitioner will change and develop with initiative moving steadily into the hands of the local community.

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6. CONCLUSION

As a conclusion the following axioms are offered:

1. No person, no culture is underdeveloped (or all are); people need an enlarged array of choices.
2. Development is a learning process for all involved.
3. Communication and human relationships are the basis for participation in development.
4. Dialogue-centered literacy *is* people-centered development.
5. Literacy is no more and no less than a communication tool.
6. The *process* of literacy promotion is as determining as its results.
7. The acquisition and use of literacy can affect the distribution of power in society; literacy is political, so is development.

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TEACHER PREFERENCES OF BOOK APPEARANCE

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1. INTRODUCTION

> One of the drawbacks of publications from big publishing corporations or centralized agencies is that their producers do not share the same background as their readership. In fact, such publishing is usually highly compartmentalized and those involved, the writers, designers, editors and printers, are probably also divided from each other by background and their role in it. Their ideas about what they see and about design are different from those of their readers. Localized low-cost printing can avoid this altogether. (Zeitlyn 1988:12)

This quotation reflects the current production system used by SIL in Peru for vernacular materials. We need to plan the future of book production, but so far the solutions are being decided mostly by expatriates. This paper attempts to express the preferences of those who will be left to produce materials after we leave.

SIL in Peru has prepared vernacular materials for 40 years, but now we need to look more toward native peoples doing it themselves. We have been producing materials a certain way with our own value system, but changes must come. The future look of bilingual materials will be influenced by the technology and raw materials available, plus different value systems. This study aims to discover the preferences of bilingual teachers as to how the final product of a book should look, therefore discovering acceptability.

2. THE TEST

Thirteen bilingual teachers, representing six language groups, served as test subjects. Nine had four to eight years of teaching experience, the others more than fifteen. Seven of the thirteen participants had had some experience in the publishing of books. The test consisted of four separate exercises according to specified criteria, using five test subjects per sort. After explaining the procedure by using two contrasting books to depict the parameters, I handed each test subject fifteen books, one at a time. The subject examined the book and then consigned it to one of two piles labeled *preferred* and *not preferred*.

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To allow each test subject to define his own cultural parameters, I gave no hint of how to determine if a book was preferred or not. As a book was put on a particular pile, I would ask "Why?" to discover what criteria that subject was using to influence his decision.

2.1. Art

The first trial concerned the sophistication of art in the books. Using books that varied from unpolished native drawings to obviously professional art, test subjects placed each book in the *preferred* or *not preferred* pile.

Results showed the absolute necessity of art that truly represents their particular culture and lifestyle. Three of the five teachers said that the best way to insure this true representation is to do their own art work. They expressed the need for some training in art to refine their own skills in drawing people, etc., though culturally accurate drawings were always accepted, no matter how unprofessional. If drawings represented another culture, they were not always accepted if the pictures could not easily be interpreted.

Comments regarding photos were that the technology is unavailable, they are nice but expensive, hand-drawn art is more natural than photos, and photos are less clear than drawings. Regarding dress, two teachers commented that their culture is changing and the art should reflect this change in dress styles.

The art sorting exercise revealed the teachers' desire for culturally acceptable art. I recommend that more thought, energy, and support be given to training these bilingual people in the skill of drawing people and landscapes. Basic techniques in line drawing should be sufficient, as anything more complex is not necessary and requires more complex printing processes.

2.2. Cover design

This sorting exercise revealed that viewers' initial attention is focused primarily on the cover illustration. Test participants preferred scenes that accurately represent the book's topic, as opposed to simple figures. They also commented on their awareness of differences in the color of covers, and on what kind of information was written on the covers, though there were no statistically significant preferences. They made the point that more training in art technique would allow them the possibility to print their own cover designs.

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2.3. Overall appearance

Paper quality was the factor judged in another sorting exercise. The consensus was to use the best paper locally available, rather than rely on acquiring imported paper. Regarding the binding of the books, the teachers recommended that glue be used to add support to the staples.

2.4. Most essential

In the final sorting exercise, test subjects ranked the fifteen books according to the books' perceived importance in the classroom. Books on different subjects representing all grade levels were used. The teachers ranked the books according to their individual worth to the success of a bilingual school, noting that all books are useful. Their first choices were books relating to their language and culture, followed by books that form the bridge to the outside culture and language. This test was given to determine the priority in book production, as limited time and resources continue to be a reality. These results showed their commitment to the vernacular language.

3. CONCLUSION

The tests prove that the teachers are proud of their language and culture, and desire to publish their own materials. They want to do it themselves, but they also know they have certain limitations. They desire the best from what they have!

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INDIVIDUAL MOTIVATION FOR LEARNING: THE ASHENINCA OF PERU

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1. INTRODUCTION

The motivation to learn is situated in the moment to moment needs of the individual. The motives that drive Ashenincas to learn are the anticipation of future need, the desire for social acceptance, and creative identity formation.

The Asheninca live in the central Amazon jungle region of Peru. Permanent contact with the outside world began about a hundred years ago and roads began to enter some valleys only twenty years ago. With increasing economic and social contact, Ashenincas are changing their learning focus, though this still depends on their perception of physical need, social acceptance, and identity formation.

2. MOTIVE FOR LEARNING: FUTURE PHYSICAL NEEDS

Ashenincas believe that they must work hard enough to provide for their own and their family's physical needs. The major source of food is the family garden, for which a new plot of land is cleared of trees, planted, cultivated, and gradually harvested every year. A family that cannot keep up with their food needs is considered to be in poverty, whereas the family that produces more than their basic needs can host manioc beer parties and have surplus produce to trade for other goods.

Parents begin early to prepare their children to provide for their needs. Infants accompany their mothers to the garden and toddlers are expected to help. The smallest carry back a stick for the fire or a piece of fruit in a miniature basket. Parents expect a child of seven or eight years to dig up manioc, cut weeds with a machete, and carry heavier loads. It is usually hot work, but children are told to work hard in anticipation of their future food needs.

The Asheninca are aware of their need for food, health, and tools that help them survive in their physical environment. Parents know

the skills necessary to satisfy these needs, and they motivate children to value these skills by relating physical needs to the skill itself. Parents' admonitions make sense to children in the light of related myths, personal experience, and recent oral histories.

3. MOTIVE FOR LEARNING: SOCIAL ACCEPTANCE

The need for social acceptance is another motivation for learning instrumental skills and proper social behavior. Rarely does anyone live alone. All young people assume they will have a spouse and family when they reach adulthood. Myths portray ideal family relations as the norm, with any deviation from the norm becoming a story theme. The Asheninca have their expectations of what the ideal husband or wife will be: someone who shows instrumental competence and behaves in an upright Asheninca manner.

The need for social intimacy is another motivation for learning. In interviews, hard work, hunting, and shamanism are cited as traits that attract women; a man lacking these skills will have difficulty in keeping a wife. The Asheninca also want acceptance by those outside their own family. Parents urge their children to learn skills so they will not be embarrassed because others see their incompetence.

The Asheninca expect to conform to the ideal of social and instrumental competence. Reference to admirable traits, such as patience and self-sufficiency, and to a child's future role in society are used to encourage children to learn specific tasks and norms of behavior. Proper learning of these brings social acceptance.

4. MOTIVE FOR LEARNING: FORMING IDENTITY

The Asheninca prepare their children for independence and self-reliance. They traditionally lived in isolated, small family groups, marrying soon after puberty. Though parents actively teach social and instrumental skills to their children, parents also expect children to be self-motivated and self-learners. Asheninca children do not learn passively, but are active learners with their personal goals.

From birth, children are reminded of someday becoming an adult and filling an adult role in society. Adults talk to infants about the adult-like things the child will eventually do. The following is a short example of forward-looking chatter.

> *Even with the newborns, sometimes their mother will talk to them. If the baby is a boy, she will say to him, "You will be a*

man. You will cultivate my field," though he is a baby. This is a custom that shows affection.

Parents orchestrate children's activities so work becomes an early habit. A person accustomed to hard work fits in with Asheninca society better than one who is not a good worker. A person's enthusiasm for work is also a reflection of the parents' child-rearing competence.

Parents also orchestrate a child's experiences to condition their bodies for hard work. A parent who properly raises a child instills the habit of work by training the child's body to make it strong enough for common tasks.

Parents expect children to want to do the tasks of adults and to behave as adults. Parents are not surprised when the child takes the initiative in trying adult-like things.

Though parents train children in basic skills, proper social behavior, and the work ethic, parents also expect children to grow into adults who have unique qualities and characteristics. Parents encourage children's independence and participation in an adult role. Children have particular preferences of what they enjoy and aspire to, and they set their own motivations for learning independent of their parents' efforts. Such individual preferences are particularly relevant to socialization in the present period of rapid change.

5. NEW TECHNOLOGIES AND MOTIVATION

Change is coming quickly, though irregularly, to most Asheninca areas. Roads pass through villages, wild game is disappearing, and families want an economy that is more than subsistence. These changes bring new challenges to Asheninca socialization.

Fathers are often perplexed by their sons' lack of motivation to learn to hunt. They blame the schools, preserved meats that can be bought, and the children's love of recreation. Older people accuse their children of not being as interested in hard labor as was their generation. The formation of villages and greater social contact has put a higher value on recreational activities that take away time formerly dedicated to hard labor with the family. The lack of motivation to learn hunting skills makes the present generation more dependent on the outside economy. That, in turn, gives them less time to practice hunting.

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Near the end of the 19th century, metal pots were introduced, another technology that the Asheninca adopted on a grand scale. Older women remember learning to make clay pots as children and remember that they were heavy and easily broken. Metal pots were more practical, and mothers stopped teaching their daughters to make traditional-style pots. No one I met knows of anyone who still uses a clay pot. The disadvantages of clay pots made acquisition of metal pots a high priority. These were typically acquired from *patrones* or merchants through labor in the outside economy. Once families had enough metal pots to meet their needs, the reason for making clay pots or teaching pottery-making disappeared.

Until recently, the Asheninca made their own clothing, a cotton pull-over robe locally called a *cushma*. Women produced additional income for the family by making excess cushmas. Few young women learn to weave clothing today, though all learn to spin cotton (now more a socialization technique). Men wear store-bought shirts and pants; women wear the traditional-style clothing made of store-bought material. Older women and young women who live away from roads and schools now weave the traditional clothing for mostly ceremonial use. Men will change into their *cushma* (robe) to relax in the evening, to wear to a manioc beer party, or to attend a regional political meeting.

Some traditional skills have become obsolete because more efficient technologies are affordable. Older adults differ in their adoption of these new ways of doing things. Some continue to work in a strictly traditional manner, others use the new technologies when they are convenient, and others have completely abandoned most traditional practices. The adult bias toward the traditional technology, and the local availability of the new technology are opposing influences in parents' insistence that a traditional skill be learned. Children have their own ideas on the importance of learning traditional skills, and adolescents increasingly choose to be more dependent on the outside economy, spending less time on learning traditional skills.

6. SOCIAL STIGMA AND MOTIVATION

Some traditional practices, such as coca chewing and shamanism are learned less often today by adolescents because of changing social norms. Ashenincas are aware of outside views of traditional practices, and they are less willing to learn practices that have a social stigma.

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The Asheninca culture was only one of many different Indian cultures of pre-colonial Peru. These ethnic groups recognized different markers of identity, such as physical markings, clothing, language, and the name by which they called themselves. The coming of the colonists, however, created a tension between the technologically advanced *mestizos* (those who speak Spanish) and the Asheninca. The mestizos saw the Ashenincas as being inferior and animal-like, which motivated Ashenincas to hide or modify their most salient markers of identity in situations of contact.

7. SOCIOECONOMIC CHANGES AND MOTIVATION

In the late 19th century, Ashenincas began to increase their participation in the outside economy. They cut trees, harvested crops, and gathered rubber in exchange for metal tools, guns, and clothing. Though many non-Ashenincas exploited them, others treated the Asheninca with respect. Some fellow-workers and missionaries believed that education would help bridge the cultural gap between the Asheninca and mestizo, and give them skills to protect themselves from being cheated.

The motivation for learning reading and mathematics came initially from the urging of outsiders, plus the Ashenincas' realization that they lacked important skills used by more successful people. Some of the first schooled Ashenincas came from mixed parentage, with the father usually being mestizo and the mother an Asheninca who worked as a maid in the household of the man. These children were more exposed to the mestizo social value of education and had the advantage of knowing Spanish when entering school. Many of the Asheninca political leaders came from this kind of background. Contact with those who sent their children to school often set an example for other Ashenincas to send their children.

Literacy runs in families. If at least one parent is literate, almost all their children study in school for many years. When the parents are not literate, school is especially difficult for the first child. Subsequent children tend to fare better, as young parents mature and younger children get help from the older ones. Many parents are unclear on why they should send their children and have little commitment to making economic sacrifices to keep a child in school. Though attending a village school is becoming a social norm, some families let their children quit school early.

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The most common reason for sending children to school is to give children the skills necessary so they will not be cheated in the outside economy. Successful first generation literates typically sent their children to school, not simply to learn basic skills for participating in the outside economy, but for a transformation of self. These parents adopted schooling as an important shaper of identity for children—an identity socially acceptable to the outside society. When asked, "Why do you send your children to school?" these parents mention the specific skills taught in the school, but they dwell on the more general goal of "being better people" or "having a better life."

Generally dissatisfied with their current situation, these parents want something better for their children than what they have. They believe education will improve the lives of the young, and this belief has taken on mythic proportions and it is taught to the children, much like the social values of honesty and hard work. Children from these families faithfully attend school because they know their parents expect them to do so.

Since the 1970s, the Asheninca have had increased contact with the outside society. Groupings of families have formed villages, and individuals have become church leaders, political leaders, and school teachers. Colonization of Asheninca areas by mestizos has pushed Ashenincas to speak out for their interests and has put pressure on them to have leaders to deal with these new problems. All villages want a leadership that can communicate effectively with mestizos and wade through government bureaucracy, while still relating closely to those in the village. Boys who attend school and learn the skills taught can be confident that they will be elected to a position in the village government. Prestige similar to that once earned through hunting prowess can come through showing competence in school-taught skills. The need for social acceptance that motivated boys to learn traditional skills now encourages them to learn in school.

Though girls are not elected to village office, many professions are available to them. Girls and boys can be teachers, paramedics, or secretaries in government offices. Asheninca girls aspire to these positions in roughly the same proportion as do mestizo girls. As Ashenincas participate more in the outside economy, boys and girls are attracted to the professions. Educated parents often send their children to school for as long as the child wants to attend. This is especially common in families in which a parent is a teacher, paramedic, or pastor. A professional has high prestige without being

elected to village office. Though salaries are low, they provide a sense of economic security and supplement the income from the garden.

Asheninca children take much of the responsibility for their own learning in school, as they do in the learning of traditional skills. Many village leaders have stories of how they took the initiative for continuing in school. Others tell of how their plan to continue their education was interrupted by a lack of money or family responsibilities.

8. CONCLUSION

As with traditional skills, not all of the motives to learn in school originate with the parents. Children need to have competence in skills that are becoming increasingly important to village life, and to form an identity that they believe will make them more socially and economically successful. They see these skills practiced when the school teacher and village leaders conduct business with outsiders, when their parents obligatorily vote in national and local elections, and when they dream of someday having a profession that uses many school-taught skills. In this sense, many Asheninca children have a strong self-motivation for study in school. They make the decision to learn according to the cultural reality they understand. This is particularly important in the light of rapid economic change and intensive contact with a different culture.

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ABSTRACTS

Mfonyam, Joseph Ngwa. 1988. Tone in orthography: The case of Bafut and related languages. Ph.D. dissertation, University of Yaounde, Cameroon. 673 pages. (Available from the editor, *Notes on Literacy*)

Joseph Mfonyam, from Cameroon, is an SIL member working as a linguistics and translation specialist with the Bafut language program, Cameroon branch.

Our main aim in this study has been to determine the best way of representing tone in the orthography of Bafut and the rest of the languages included in this study. Before ever reaching this goal, we, however, have had to answer a number of questions for each language studied. How many tone levels are there in the language? What are the tone processes found in each language? What role does tone play in the grammar of the language in question? The first phase of the work has, therefore, been an analysis of the tonal system of each language.

The work done on the Bafut language has been our starting point and has therefore given us a basis for a better understanding of the tone systems of the other languages.

We have had to answer a number of questions. (a) How does tone function in Bafut? Here, we have had to look into the tonal behavior of the Bafut language. This, in the main, concerns a study of the changes that underlying or lexical tones undergo in grammatical constructions. We have had to go through the grammar of Bafut in order to fully see the function of tone in the language. (b) Why do lexical tones change when used in grammatical constructions? In order to answer this question adequately, we have had to make a study of the underlying tones of words. After the study of the underlying tones of words and morphemes, we have, therefore, been able, in most cases, to account for tonal changes. In the course of explaining these tonal changes, we have come up with the rules underlying them. In the second half of chapter four we have proposed the tone rules (hereafter, T-rules) which account for the tonal changes in Bafut. The T-rules show that there are a lot of tone processes in Bafut.

A major part of the study is devoted to answering the above questions. These questions are important because the way we decide to represent tone in the orthography depends on the answers we find to them. In order to be able to present a valid and efficient system of marking tone in a language, an accurate and detailed analysis of the

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tonal system is imperative. It is in view of this fact that we have pursued our analysis and explanations of tonal behavior in some detail.

Chapter twenty of the study is devoted to determining the best way of marking tone in Bafut. In order to decide on the best tone orthography we had to conduct an experiment in which people were taught not only to read but also to write tone using four different systems. The best tone orthography is one which enables people to read and write the language well. Such a system is one that makes the necessary meaning distinctions and is easy to read and write. The system should be easy to teach and consequently to learn. In order to meet these conditions, it should also be systematic.

Part III of the study is devoted to a study of the tone systems of Bambili, Mankon, Bambui and Nkwen in order to determine how tone could best be represented in the orthography of each language. These languages are closely related to Bafut. In the light of the analysis of the tone system of each of these languages and in view of the tone orthography proposed for each language, it has been possible to draw conclusions regarding a tone orthography that might work for these languages and possibly for the other languages within the same linguistic group.

In order to extend the results of the studies of the Ngemba languages to other languages outside the group, we undertook the study on Limbum. The results of the Limbum experiment confirmed our findings from the study of Bafut and the other Ngemba languages.

After the Limbum study we proceeded to study the tone systems of Yemba, Basaa and Bagyeli. These languages were selected to reflect a wide spectrum of the Bantu languages of Cameroon. Limbum and Yemba fall within the larger group of Eastern Grassfields languages. We have proposed a tone orthography not only for each of these languages but also for the whole group.

In the light of the results of the Bafut and Limbum experiments and in view of the conclusive results relating to our study of the tone systems of the various language groups, we have proposed a tone orthography for Bantu languages in chapter thirty-two.

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Koffi, Ettien N'da . The interface between phonology and morpho(phono)logy in the standardization of Anyi orthography. Ph.D. dissertation, Indiana University. 313 pages. (Available from UMI, order # 91-19736).

Ettien N'da Koffi devoted a whole dissertation to orthographic matters because of the frustrations he experienced attempting to translate the Bible into his native language. He is currently doing post-doctoral studies at Fuller Theological seminary to be a translation consultant for the United Bible Societies in Africa.

A good orthography, it is argued, reflects closely the phonological, morphophonological, morphological, and some syntactic structure of the language it seeks to represent. The present work examines these areas in an attempt to provide an efficient and easy to learn orthography for Anyi. It investigates the interrelations between orthography and word- level phenomena such as vowel harmony, palatalization, metathesis, nasalization. It also discusses the thorny issue of the orthographic representation of morphophonemic variants as they relate to Grade II and Grade III consonant mutations. Additionally, the challenging concept of "word" is investigated. One of the most serious problems facing the creation of an orthography for an unwritten language is how to determine what an (orthographic) word is. To arrive at what may be conceived as a word in Anyi many word-identification criteria are used. These criteria together with the analysis of the morphological processes of affixation, partial and complete reduplication, semi-affixes, compounding, verbal-noun formation, linkage, proverbial words, and interlexical words help define what a word is in Anyi and how it can be represented in the orthography. At the syntactic level post- lexical phenomena such as word-initial vowel deletion, contraction, utterance nasalization, and vowel lengthening are discussed. Syntactic considerations are also taken into account in the discussion of punctuation marks.

The attempt to provide a standardized orthography presupposes the discussion of sociolinguistic factors such as dialect variation, linguistic insecurity, political structure, urbanization, religion, the status of Anyi vis-à-vis French (language of upward social mobility), and the influence of the French-Anyi bilinguals on the orthography. Since orthography and pedagogy are closely related, some aspects of the discussion center around the problems that metathesis and long words create in reading (aloud). The orthography is geared towards non-fluent readers so as to minimize the time spent in learning it.

VanWagner, Lynette S. 1992. Predicting the acceptance of standardized vernacular languages: The case of Tajumulco Mam, a Mayan language of Guatemala. M.A. thesis, University of Texas at Arlington. 188 pages. (Available from the editor, *Notes on Literacy*)

Lynette VanWagner is an SIL member working as a survey and translation specialist with the Tajumulco Mam language program, Central America branch.

This thesis examines the factors that influence the acceptance or rejection of a standardized form of a vernacular language, particularly those vernacular languages which have no commonly accepted prestige variety. It focuses on three factors of key importance: the dual role of language as a communication tool and an expression of ethnic and social identity, the linguistic divergence between the varieties of the language, and the role of advocates in promoting the standardized form of the language. Case studies are examined from Kenya, Cameroon, and Guatemala. The thesis includes an overview of Guatemalan history and language policy and a detailed sociolinguistic sketch of Tajumulco, a Mam-speaking Mayan community of some 40,000 people in the Guatemalan highlands. It proposes using a cost-benefit model to predict the acceptance of standardized vernacular languages. It discusses the viability of Standard Mam in Tajumulco from a cost-benefit perspective and recommends courses of action for vernacular literacy in Tajumulco.

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REVIEW

Literacy, language, and learning--The nature and consequences of reading and writing. Edited by David R. Olson, Nancy Torrance, and Angela Hildyard. Cambridge University Press, 1985. Pp. 438. Paper $ 24.95.

Reviewed by Lorna Priest

Francis Bacon said of printing, gunpowder, and the compass: "These three have changed the appearance and state of the whole world." (p. 2) The advent of the printing press, making literacy available to the world, has truly changed the world we live in.

Is literacy a decisive factor in historical and cultural change? Does it alter the mental and social lives of individuals? If so, how? Does learning to read and write change children's speech, thought, or orientation to language? What are children and adults learning when they acquire literacy skills? Do reading and writing require the development of those special competencies that we associate with schooling? Are there differences between speaking and writing? Are there differences between oral and written language? These are the questions addressed by *Literacy, Language, and Learning*.

This book is a compilation of papers from authors of various disciplines, including psychology, linguistics, anthropology, communications, and education. The book was mostly written from a Western standpoint, with all studies done in North America or Europe. Even so, the information in this book is relevant to those of us working in preliterate or newly literate societies.

The first section of the book is about how literacy has affected our society. An interesting item for SIL's work is that a literate person is more likely to migrate to the city than a nonliterate person. The migration of people to the United States was due in part to literacy, as those who can read have less difficulty imagining a new world and a new beginning.

We are reminded that when something is written, the communicator feels obligated to defend his statements and thus becomes committed to his message. In oral communication, one is less tied to the message. The impact of a written statement is generally greater than if it is oral.

Section two is about the structural differences between oral and written language, speaking, and writing. Writing is generally more detailed than speech and has more well-balanced sentences. A written

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language changes less rapidly than spoken language. In writing, the author must anticipate all likely confusion on the part of the reader. The writer can make fewer assumptions than one who is speaking because he is writing in isolation and does not always know the background and experience of those who will read his work. The goal of the creative writer is to get the reader to fill in as much as possible. The more the reader supplies, the more he or she will believe and care about the message being read.

Section three is about competencies needed for comprehending, thinking, and writing, and how these differ from the competencies needed for comprehending and using oral language. It was interesting to note that when a child is read to, there is likely to be early success in reading. Children who had stories read to them by the age of five had a high knowledge of literacy. By the time those children were seven, they had a higher degree of reading comprehension than those children who had just drawn or looked at books. The children who interacted (discussion of events, "what if . . .") with the parent about the story had even higher degrees of reading and comprehension. Questioning that allows the child to discuss the event, think about what would occur if something else happened, or think about the emotions of the characters allows the child to learn to think critically. When questions were asked of the child that were obvious, there was less likelihood of the child being encouraged to learn to think critically. An obvious observation was that there was also a correlation between the parent enjoying reading and the child also enjoying reading.

Section four discusses the two-way relation between phonology and orthography. When we learn to "read" calendars and clocks, we acquire a visual means of representing the passage of time. When we learn to read music, we have a visual representation of music. Learning to *read* imposes organization by specifying units or interrelationships that we could not otherwise *see*. When a person learns to read and to spell, a visual representation of speech is acquired. "Because print gets established in memory by being built onto learners' knowledge of spoken language, acquisition may work changes in children's competencies with speech." (p. 333)

Once a language is written, the phonology is frozen. This limits changes that occur in speech. It can also teach members of other dialects the "correct" pronunciation. Having an understanding of one's orthography can actually affect one's perception of speech. A

person who knows how to read may actually "hear" phonemes not actually there because they know the spelling of the word. This occurs less often with poor spellers. A characteristic of children's beginning spelling in English is that nonstandard patterns of spelling reflect phonetic facts. An example of this in English is children learning to spell who will often omit an *m* or *n* when phonetically the vowel is nasalized rather than being the represented consonant. The spelling patterns of newly literate groups can test whether the orthography is an accurate representation of the language.

Literacy itself does not *do* anything. It is what we do with literacy that affects social change, modernization, and industrialization. "Literacy is important for what it permits people to do to achieve their goals or to bring new goals into view." (p. 15)

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HOMEMADE SILKSCREEN INK RECIPE

Linda Easthouse

Linda Easthouse and her husband Randy are literacy specialists with the Conchucos Quechua program of the Peru branch.

Makes ½ cup (enough for several hundred letter-sized copies)

3 tsp. black or dark blue dye powder (commercial type used to dye wool)

¼ cup very cold water

3 tbs. cornstarch

½ cup finely grated pure (fat with lye) laundry soap (not detergent or hand soap)

Read the instructions for the type of dye powder (i.e., dissolve in hot or cold water?)

Mix the cornstarch and water. If the dye dissolves in cold water, add it now. If not, put the cornstarch mix on to cook and as soon as it begins to boil add the dye. Cook over low heat until very thick, like soft butter. Remove from heat and stir in the grated soap. Whip until the soap is completely dissolved.

Cool and use as regular ink in silkscreens. (We have not tried this in a Gestetner-type machine.)

A few cautions:

1. It doesn't keep well, just make the amount you can use in a few days.
2. It works better on a higher quality paper. Newsprint or very absorbent paper tends to get blotchy.
3. The quality of cornstarch is probably the key to any failures. We have found that different brands produce significantly different results. It may be better to resort to U.S. cornstarch, which is at least consistent, or else be prepared to play with each batch by adding more cornstarch as needed.
4. Any "ink" not used the first day should be stored in a cold place (refrigerator or outside in the Andes). To use, pour off any water that has separated out. If it becomes too watery, it is probably the quality of cornstarch and it is best to just throw it out and make a fresh batch.
5. The quality and brand of dye used produces different "blacknesses." Add more or try different brands until satisfied with the results.
6. We tried red, which came out pink. It was not very readable after it dried. Maybe a different dye or burgundy would work better.

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SUMMER INSTITUTE OF LINGUISTICS
7500 WEST CAMP WISDOM ROAD
DALLAS, TEXAS 75236

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NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236
U.S.A.

Notes for contributors: Readers are invited to submit letters of comment and publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 West Camp Wisdom Road., Dallas, Texas 75236.

Computer media: Contributors are encouraged to submit copies of their manuscripts on computer media (MS-DOS or MAC format) along with a paper copy of the manuscript.

ISSN 0737-6707

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THE WRITING AND READING OF TONE IN BANTU LANGUAGES

Constance Kutsch Lojenga*

Constance Kutsch Lojenga was a primary school teacher in the Netherlands before joining SIL. She worked in Côte d'Ivoire and Burkina Faso between 1975 and 1983, gaining experience in phonology and tone analysis to develop readable orthographies and primers. She developed special tone teaching exercises for those who are already literate. Since 1984 she has been a linguistics and literacy consultant in Eastern Africa, with her main assignment to E. Zaire. At present she is working on a Ph.D. in African linguistics.

1. INTRODUCTION

In this paper I will discuss the relationship between linguistic aspects of tone in African languages on the one hand, and their practical application in the development of the orthography and the teaching of reading on the other hand.

Tone constitutes an integral part of nearly all African languages spoken south of the Sahara desert. Words consist of consonants, vowels, *and* tone (patterns), and each of these may serve to indicate minimal distinctions both in the lexicon and the grammar of a language.

When developing an orthography for an African language, it is necessary to study tone and the function of tone in that language in much the same way as one establishes the distinctive consonants and vowels for that language. Once the basic tone system is established and the function of tone has become clear, one needs to answer the following practical questions: Should tone be represented in the orthography? If so, should tone be written everywhere, i.e., on each syllable, or only in certain places to disambiguate? Which of the different tones should be written, and how? And what are the repercussions of this for the teaching of reading?

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*Various people have contributed by providing language data for which I express my gratitude here. Digo data is drawn from Martien de Groot. 1988. *Description of the Digo Verb System*. Unpublished ms. Duruma data is drawn from Newman. 1988. *Duruma Verb Description*. Unpublished ms. Endo data is from Alice Ottow. Rendille data is from Steve Pillinger. Sabaot data is from Iver A. Larsen. Tharaka data is from [illegible] Kibiubi.

This paper has the following outline. After presenting a few basic assumptions, Section 2 discusses some general topics about tone in African languages: tone versus intonation, tone systems in different types of languages, especially focusing on isolating and agglutinative languages, and what is meant by *functional load* of tone in a language. Section 3 discusses in more detail lexical and grammatical tone in Bantu languages. Section 4 treats tone orthography, first from a more general perspective, then more directly geared toward Bantu languages. Section 5 contains some practical remarks from which to develop a strategy for the teaching of tone.

It is clear that major languages like English and French have orthographies that are far from *ideal*. One letter or letter combination can be pronounced in several ways, or one particular sound can be represented in the orthography by different letters or digraphs. Those involved in the teaching of reading often wish that the alphabet could be made more *systematic*: one symbol representing one sound, and one sound always represented by the same symbol. They know that the teaching of reading would be speeded up greatly. However, English, French, and other languages have such a wide distribution that changes in these historically-grown orthographies that are far from ideal at present are virtually impossible. It means, though, that children take quite a long time to master the skill of reading.

In the teaching of reading in vernacular languages in Africa, the situation is quite different. First, much focus is on the teaching of reading to preliterate adults. Second, even where we aim at children, the teaching will often have to be extracurricular, since they mostly learn to read in a national language at school. This means that we do not have the *luxury* of spending several years teaching people to read. A conscious aim in developing orthographies for African languages should therefore be to make them as systematic as possible, following the *phonemic* principle, by which each distinctive sound is represented by one symbol, and each symbol represents one distinctive sound, i.e., a system with no underrepresentation on the segmental level. This means that, if a language has five vowels, it will be written with five vowels. If it has a seven-vowel system, each of the vowels should be represented in the alphabet. If it has nine vowels, all nine should be represented by distinct symbols in the orthography. Similarly, in the consonant system, if a language has two kinds of *b* (egressive and implosive), both should be represented in the alphabet, e.g., *b* and *bh*, or *b* and *bb* as is done in some other languages.

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I have often heard the remark that *adding* different symbols and/or digraphs would complicate the system, while writing the language with the same vowel inventory as the national language (mostly five vowels) would make it much easier. Reality is far from that. Things may *look* easier for the eye, but if there is underrepresentation, the people have to *guess* their way through the reading, which means they try, get stuck, and have to reread and reread. Since they will not immediately grasp the meaning, they get discouraged and give up reading in their own language. A system that *looks* maybe a bit more complicated, with a few extra vowel symbols or digraphs for consonants, needs some systematic teaching (for those already literate in a national language, as well as new readers), but will ultimately prove much more satisfactory. The result will be that people can decipher a text without getting stuck, and without having to reread, and they will grasp the meaning more readily.

2. TONE IN AFRICAN LANGUAGES

2.1. Tone versus intonation

Languages like English and French can be called *intonational*. Words consist of sequences of consonants and vowels; a sentence has an intonational contour spread out over all the words, with stressed and unstressed syllables alternating, based on the basic stress patterns of the words as well as the composition of the sentence. The important feature in which intonational languages differ from tone languages is that, on the whole, intonation does not cause distinctions in word meaning, whereas tone does. If one does not use the correct intonation, one will sound *foreign*, but people will still get the meaning. As mentioned in Section 1 above, however, tone must be considered an integral part of the word in most African languages. Much in the same way as consonants and vowels, tone on any one syllable or word may signal minimal distinctions in meaning.

This means that if a person trying to learn a language does not pronounce the correct tone on a syllable or word, he will not only sound *foreign*, but people may not understand him, or they may get a wrong meaning. Similarly, if this same foreigner, trying to understand native speakers, does not catch words and phrases on their correct tone, he will either not understand or misunderstand them. The amount of possible confusion and ambiguity is directly proportional to the functional load of tone in a language.

2.2. Tone systems

The first step in the analysis of a tone language consists in finding out how many basic tones there are: Is it a two-tone system, a three-tone system, or a four-tone system? How many level tones are there? Are there any rising or falling tones, and how can they be interpreted?

Looking at a number of languages of different language families in Africa, I observe the following two tendencies. First, languages with a basic tone system containing more than two levels are often isolating languages with short words. If not highly monosyllabic, they are disyllabic. On the other hand, the highly agglutinative Bantu languages with longer words have basically a two-tone system (with or without the feature of downstep and/or a system of internal tone sandhi).

Highly monosyllabic languages often have three or four tone levels (and quite often a rising and/or falling tone as well), and any syllable can be pronounced on any one of these tones, creating different meanings.

Attié (Kwa, Côte d'Ivoire)

nā	(extra high)	'fallow field'
ná	(high)	'comb, red'
na	(mid)	'father-in-law, son-in-law'
nà	(low)	'kind of fruit'
nǎ	(mid-low)	'animal trap, fat'

In addition, these languages use tone to make a number of distinctions in the grammar, especially in the verbal system, as is shown in the following example.

Attié (Kwa, Côte d'Ivoire) (the syllable-final -n represents nasalization of the vowel)

hān	zē	'we have gone'
hān	ze	'we are going'
hán	ze	'we should go'
hán	zē	'let us go'
hān	zē	'we didn't go'

Lendu (Central-Sudanic, Zaire)

ni	rà rá	'you went'
ni	rá rá	'you should go'
ni	rà rá	'you are going'
ni	ra rá	'you will go'

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Thus, in languages that have a tendency to be monosyllabic, there appear to be numerous instances of tone distinguishing between various lexical items or grammatical constructions. Bantu languages are on the other end of the scale. They tend to have long words, and tone is less frequently the only distinguishing feature between nouns especially. Tone plays a role particularly in the verbal system of Bantu languages, as will be seen in Section 3 below.

2.3. Functional load of tone

Each African tone language uses tone in different ways to signal contrasts in the lexicon and grammar. The basic tone system (two or more tones) and the basic word structure (isolating or agglutinative) play a significant role in the way in which tone functions in a language. There is, of course, individual variation between languages.

Tone has a *heavier* or *lighter* functional load according to the intensity with which it is used to make minimal distinctions of meaning, and hence the amount of confusion that may be caused by the wrong speaking, hearing, or reading of tone. It must be said here that even if tone has a very light functional load, or hardly any in a language (e.g., Lingala), it still is a tone language because each syllable of each word has its own tone, or each word has its own tone pattern.

Languages vary in the way they use tone in the lexicon and in the grammar. In the lexicon, minimal pairs or sets for tone will be found distinguishing two or more nouns or verb infinitives. It is a good principle to *compare what is comparable*: to study tone in the noun system first, keeping track of all minimal pairs/sets found. Following that, one could do the same thing for verbs in their most basic form: an infinitive or imperative, listing all minimal pairs/sets distinguished by tone alone. A number of languages show minimal tone distinctions in the pronoun set, i.e., different pronouns are distinguished by tone alone.

In many Central-Sudanic languages, the singular and plural pronouns form tonal minimal pairs, as for example in Lendu: ma 'I', and mà 'we (excl.)'; ni 'you' and nì 'you (pl.)'. In Ngiti, the first person pronouns are the same as in Lendu, the second person pronouns are nyɨ (sg.) and nyɨ̀ (pl.), and the third person pronouns are àbadhi (sg) and abádhí (pl.).

In many languages, tone functions much more heavily in the grammar. Tone may distinguish between certain verb tense/aspect

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forms, where the contrastive tone may occur either on the verb stem itself, on the subject pronoun/prefix preceding the verb stem, or on both.

As seen above in Lendu, 'I' and 'we' differ only by tone. Similarly, 'you (sg.)' and 'you (pl.)' are a tonal minimal pair. However, based on the verb tense or aspect used, each of these can be pronounced on a different tone. In the following examples, tone changes on the pronoun and the verb stem are determined by the tense or aspect.

ma bbĭ bbĭ	'I walked'
mà bbĭ bbĭ	'we walked'
má bbĭ bbĭ	'I will walk'
mâ bbĭ bbĭ	'we will walk'
ma bbí bbĭ	'I should walk'
mà bbí bbĭ	'we should walk'
má bbí bbĭ	'I am walking'
mâ bbí bbĭ	'we are walking'

Tone may distinguish between affirmative and negative forms of a verb, as in Attié (Kwa, Côte d'Ivoire)

mè	shè	shè	'I ate yam' (SVO)
mé	shē	shè	'I didn't eat yam' (SVO)
ò	zè		'he went'
ò	zē		'he didn't go'

Tone may distinguish between subject and object case in Nilotic and Cushitic languages. In Rendille (Cushitic, Kenya) all consonant-final masculine nouns have low tones in subject position.

	makhaábal	'man' (in isolation and as object)
	makhaabal	'man' (as subject)
cf:	makhaabál	'woman'
	ínam	'boy' (in isolation and as object)
	inam	'boy' (as subject)
cf:	inám	'girl'

iname ínam á agarte 'the girl (S) saw the boy (O)'
inam inám á arge 'the boy (S) saw the girl (O)'

In Endo (Nilotic, Kenya), a word has different tones according to whether it functions as subject or as object in a sentence. Since Endo is a verb-initial language, both subject and object follow the verb. The particular tone on which the word is pronounced will indicate its subject or object case. Object tone is the same as in isolation. The change comes when it is subject.

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pàlîin	'farmer'	kàchìntà	pàlîin	'a farmer fell'
kòòntì	'animal horn'	kàchìntà	kòòntì	'a horn fell'
nyóróóròyóòn	'chain'	kàchìntà	nyóróóròyóòn	'a chain fell'

Tone may distinguish between *direction* and *location* on postpositions. In Lendu (Central-Sudanic, Zaire), *direction* and *location* are signaled by different tones on the postposition: *location* is marked by a high tone mostly replacing the original low tone of the directional postposition, though sometimes added to it, resulting in a rising tone.

kɛ́	djï	dza	djɔ̀	'he is climbing the house' (directional)
kɛ	djï	dza	djɔ́	'he has climbed the house and is still there' (locational)
kɛ́	si	mà	bâ	'he will arrive at our place' (directional)
kɛ	sì	mà	bá	'he has arrived at our place' (locational)

Yet other ways may be found in which tone functions in the grammar of a language.

Tone functioning in the grammar may be overlaid on lexical tone, hence it is very important to first discover the basic tone system in a language by studying tone in the lexicon, before proceeding to study tone in the grammar. If one starts with the latter, it is often virtually impossible to disentangle lexical tone from grammatical tone.

3. TONE IN BANTU LANGUAGES

3.1. The structure of Bantu languages

Bantu languages are highly agglutinative. Each noun or verb consists of a root/stem, which is in the majority of cases already disyllabic. Each noun is preceded by a class prefix, often consisting of a separate syllable. The majority of the nouns in isolation are therefore at least trisyllabic. Of course there may be a zero prefix for class 5, and similarly, the prenasalization of the class 9/10 prefix does not add an extra syllable to the noun stem. A number of Bantu languages are found with a pre-prefix preceding the class prefix, which means that most nouns in isolation are at least four syllables in length. Disyllabic verb stems, preceded by the infinitive prefix ku- or i- yield trisyllabic forms (only a handful of monosyllabic verb roots are found in each Bantu language). The imperative is the verb stem by itself, i.e., at least a disyllabic form; any other verb form consists of a concatenation of morphemes and is much longer.

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The following are some examples of very long verb forms, which are not uncommon in Bantu languages. An original verb root can be followed by several verb extensions and preceded by tense or aspect prefixes, subject and object prefixes and negative or relative prefixes.

Swahili:	wataitimilizishiana	'they will accomplish it for each other'
Mashi:	ntankanacimúdugiirirage	'and if I had not again cooked the ugali well for him/her'
Tharaka:	indaramothongothangiirie	'I lifted him/her a couple of times'

3.2. Lexical tone contrasts

Before studying tone in the area of grammar, it is necessary to establish the basic tone patterns on nouns and verbs as they function in the lexicon. It is good to separate nouns and verbs, as will become clear from what follows.

Bantu nouns basically have disyllabic roots. This means that with a two-tone system, four tone patterns may be found: HH, HL, LH, and LL. These four patterns may be realized on the noun-plus-prefix in different language-specific ways.

In Lingala (Zaire) most of the nouns exhibit exactly these four tone patterns on the disyllabic noun roots, preceded by a class prefix on a low tone. Examples are all from class 5:

likambo	L.LL	'problem'
likei	L.LH	'egg'
litáma	L.HL	'cheek'
libándá	L.HH	'courtyard'

In the following example from Pokomo (Kenya), the tone pattern is linked to the noun from left to right, beginning on the prefix. The last tone of the pattern is simply spread on the left-over syllable. Examples are from class 3.

múkíndú	HH.H	'type of palm'
mutsúzí	LH.H	'soup'
múkono	HL.L	'arm, hand'
mubano	LL.L	'smoked fish'

It seems that in Bantu languages with many nouns consisting of three syllables or more, there are not too many instances where tone is the only feature distinguishing between two otherwise identical words in isolation, i.e., tone most likely carries a very light functional load in this part of the lexicon.

However, verb infinitives all have one and the same prefix, ku-/ko- in most Bantu languages, followed by a (C)VCa stem. Since the verb-

final -a is not part of the basic verb root, it does not carry distinctive underlying tone. The verbs generally split up into two tone classes, based on a high/low distinction belonging to the root, which is not necessarily realized on the vowel of the root.

In Lingala (Zaire), the H/L distinction is indeed realized on the first vowel of the verb stem:

kosála	'to do'	kozala	'to be'
kokóma	'to arrive'	kokoma	'to write'

However, in Digo (Kenya), the tones on the infinitives have moved to the last syllable of the verb, so the distinction between high-tone verbs and low-tone verbs is marked on the verb-final -a.

kulolá	'to marry'	kulola	'to look'

It will be clear that there is much more chance of tone being the only distinguishing feature lexically between verb stems with different meanings than with nouns, where there is so much more variety in noun-class prefixes and where there are twice as many different tone patterns. So, even though one rarely finds any tonal minimal pairs in the noun system, the verb system generally contains a high number of minimal pairs. It may therefore be necessary to mark the distinctive tone on the verb stem in the orthography. The following examples are just a few of the many tonal minimal pairs between infinitives in Mashi (Zaire) where the distinctive high or low tone is realized on the prefix rather than on the root vowel or on the verb-final vowel.

kúheka	'to not be ripe'
kuheka	'to arrive at the end'
kúhuma	'to touch'
kuhuma	'to yield a mushroom'
kúlaba	'to decorate'
kulaba	'to be on the point of expiring'
kúrhimba	'to lack buyers in the market'
kurhimba	'to beat the drum'

3.3. Grammatical tone contrasts

Apart from lexical tone distinctions in the noun and verb system, most Bantu languages also have tone contrasts in different areas in the grammar. When speaking about lexical and grammatical tone, we are not saying that there are two different tone systems, but we are indicating in which parts of the language tone functions.

A number of Bantu languages have a third person singular subject prefix for certain tense/aspect forms that is minimally distinctive for

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tone from the second person singular subject prefix. In such languages, it is important to mark this tonal distinction in the orthography.

In Duruma (Kenya), the second person singular subject prefix is always u-, and the third person singular subject prefix is u- or a-. The choice is determined by the verb tense or aspect. However, there is a tonal difference between the two u-prefixes, which in this language is realized on the following syllable, as follows:

kudũnga	'to pierce'
unadũnga	'you are piercing'
unádũnga	'he is piercing'
undadũnga	'you will pierce'
undádũnga	'he will pierce'

In some Bantu languages, the object prefixes for third person singular and second person plural are distinguished by tone alone, e.g., in Mashi mú- 'him' and mu- 'you (pl. object)'.

amúbona	'he saw him'
amubona	'he saw you (pl.)'
ámúbona	'he will see him'
ámubona	'he will see you (pl.)'

It is suggested first to investigate if there are minimal tone distinctions in the sets of subject and object prefixes before embarking on the study of tone in the more difficult areas of the grammar.

Another area where tone will most likely function is the verb tense/aspect system. This is often much more difficult to discover since the distinctive tones indicating different tenses or aspects may be realized on the subject prefix and/or the verb stem, and in addition may be overlaid on the lexical tonal distinctions into two verb-tone classes. If, in addition, the language has a system of internal tone sandhi, it may be quite difficult to disentangle these different features from the resultant surface forms.

One widespread general feature (which occurs in Bantu languages, other Niger-Congo languages, and Nilo-Saharan languages) is that the different verb forms can be divided into two major groupings, perfective and imperfective aspects. Imperfective aspect and/or subjunctive mood may be marked by a high tone, often realized on the subject prefix. Therefore, when investigating tone, it is advisable to check through all different verb paradigms to see if there are two major categories: those which begin with low tone and those which begin with high tone. The following step would be to see if this is

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linked in any way to a perfective/imperfective aspect distinction or to a subjunctive/non-subjunctive mood distinction. At the same time, one will want to see if any of these forms are identical segmentally, showing tone to be the only distinguishing feature. Languages where there are not at least two paradigms distinguished by tone alone are rare.

The initial high tone on the prefix may cause additional tonal alternations elsewhere in the verb form, but since these are triggered by the initial high tone on the subject prefix, it may be sufficient to mark tone on the subject prefix only, in order to disambiguate. If a verb is part of a minimal tone pair and/or the object prefix 'him' or 'you (pl.)' is used in the verb form, it may be necessary to mark tone there, too.

In Mashi (Zaire), the narrative past and the future are distinguished by tone alone on the first syllable of the verb form.

nagánja	'I counted' (narrative past)
nágánja	'I will count' (future)

Similarly, the recent past and the distant past are also distinguished by tone on the first syllable of the verb form.

nalasíre	'I wept' (recent past)
nálasire	'I had wept' (distant past)
rhwalángaga	'we kept (it) well' (recent past)
rhwálángaga	'we had kept (it) well' (distant past)

The following is a set of four examples distinguished by tone alone. The verb *kurhabaala* 'to help' is transitive, and has a third person singular or a second person plural object prefix in the different forms.

rhwámúrhabaala	'we will help him'
rhwámurhabaala	'we will help you (pl.)'
rhwamúrhabaala	'we helped him'
rhwamurhabaala	'we helped you (pl.)'

If, in addition, there is a lexical minimal tone pair between two transitive verbs, the number of tonally contrastive forms between narrative past and future or between recent past and distant past could increase to eight in each case.

Finally, does tone function anywhere else in the language, causing minimal distinctions for meaning? It is good to investigate if there are any other verbal prefixes carrying different meanings which are distinguished by tone alone. Are there any affirmative and negative paradigms distinguished by tone alone? (See the Attié examples presented above in Section 2.3 of a non-Bantu language.) Mashi has

relative clauses distinguished from their non-relative matrix sentence by tone alone.

In addition to these important aspects of tone in the verbal system, one should always be on the lookout for minimal pairs in other small word classes, e.g., in conjunctions. Lendu (Central-Sudanic) has both *ndè* (low tone) 'and then' and *nde* (mid tone) 'but'. Both can occur in the same position in a sentence, and clearly need to be marked for tone in the orthography.

4. TONE ORTHOGRAPHY

In the past, there has been much resistance to representing tone in the orthography in a number of African languages, due to several factors, like:

—It is a feature not found in English, French, or Portuguese.

—The difficulty of analyzing the tone system of the language and hence determining exactly where tone should be written in the language.

—The natural supposition of many people is that an orthography that *looks* more difficult, is harder to read. (I have argued above that *not* writing tone often makes it more difficult, if not impossible, to read without previous knowledge of the content, since it underdifferentiates and people have to guess their way through a text.)

4.1. Symbolization of tone in the orthography

There seems to be a limited choice as to what symbols can and should be used to mark tone in the orthographies of African languages. I have encountered the following three systems:

a. The use of accents

acute accent:	á	é	í	ó	ú	(high tone)
grave accent:	à	è	ì	ò	ù	(low tone)
circumflex:	â	ê	î	ô	û	(falling tone)
wedge:	ǎ	ě	ǐ	o	ǔ	(rising tone)
no accent:	a	e	i	o	u	(mid tone)

In some isolated cases one finds the use of an overstrike or a tilde to mark tone: ā, ū, or ã, ũ.

These accents are placed on the vowel of the syllable in question. This system can be used for any type of language for both long and short words. It has been readily accepted in countries where French is the official language, since three of the four diacritics are used in the

French orthography, albeit with a different function. I would expect that introducing such symbols in countries where Portuguese is the official language should not be too difficult. Anglophone countries tend to be very resistant to this (or any other) system of symbolizing tone in the orthography of local languages.

Even though this system is most widely used for languages that mark tone—and it seems by far the most relevant way of marking tone in Bantu languages—it has a small disadvantage in case both high and low tone need to be marked (for example, a three-tone language in which the mid tone is left unmarked). The grave and acute accents are mirror images of each other. This may in some cases initially be a little confusing to the prospective reader, and special emphasis needs to be given to help the new reader fix these accents in his mind together with the correct tones. Bantu languages, with two underlying tones, will in most cases only need one of these symbols: either high-tone marking by an acute accent, or low-tone marking by a grave accent, leaving the other one unmarked. Thus, the slight problem mentioned here, has no relevance for Bantu languages.

b. The use of punctuation marks preceding and/or following the word

	''na	extra high
	'na	high
zero-marking	na	mid
	-na	low
	=na	extra low

combinations of these for rising or falling tones

This system may look somewhat unusual, but it has several advantages:

—The punctuation marks are more distinctive from each other than the accents.

—It is very useful for languages with more tone levels (the complete set can easily handle four or five levels, attested in a number of non-Bantu languages).

—Rising and falling tones can be represented fairly easily by combinations of these level tone symbols, one preceding and one following the word.

Attié (Côte d'Ivoire)

-ne'	(LH)	'tomorrow'
na-	(ML)	'animal trap'

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The main disadvantage of this system is that if it were used to mark tone on every syllable in languages with long words, the words would have to be broken up after every syllable. This makes the system of tone writing by punctuation marks unacceptable for Bantu languages, which have such a high degree of agglutination. It has proved to be very useful, though, for highly monosyllabic languages, which tend to have more tone levels.

c. The use of special marks to indicate different grammatical categories

In Sabaot (Nilotic, Kenya), the tone on a word as the subject is different from the tone on the same word as the object. The colon is used to indicate that the word should be subject, as follows:

kamwoochi	:kwaan (VS)	'his father said to him'	(kwaan is subject)
kamwoochi	kwaan (VO)	'he said to his father'	(kwaan is object)

Another minimal tone contrast in this language is the difference between 'we' and the indefinite 'one'. The latter is marked by a slash preceding the word, as follows:

kikiibat mbareet	'we ploughed the field'
/kikiibat mbareet	'one ploughed the field'

A similar approach was followed in Engenni, where different verb categories were marked by different symbols, which bore no direct resemblance to the tone. The people had to learn these as belonging to a certain tense or aspect. This also helped to deal with the problem that the tones on the different verb tenses and aspects would sometimes affect the tones on the preceding and following noun phrases.

In the cases presented above, the special marks serve to disambiguate between certain grammatical categories distinguished by tone alone. The teaching of tone writing in this way will have to follow a different approach, since it is not linked to people's awareness of different tones. Instead, we will have to raise their awareness of certain grammatical features in relation to the specific marks used. This approach appears to be helpful for writing grammatical tone in agglutinative languages, especially when the verb tone influences the tones of the words preceding and following, or when there is no regular paradigm for the differences between object and subject tone. Systems like these have not yet found widespread use in Africa however.

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Other systems for symbolizing tone may be used elsewhere in the world, but have found virtually no acceptance in Africa. These include the use of raised numbers following the word, as was done in Mexican languages at some point, and the use of certain letters, e.g., *h* at the end of a word to indicate a particular tone (in Southeast Asian languages).

4.2. How much should tone be written?

To make a decision as to how much tone should be written in a language, the following two interrelated questions need to be answered:

1. Should all level tones, as well as rises and falls, be symbolized in the orthography?

2. Should the symbols chosen be used to write tone everywhere in the language, or should tone be marked only in those places where there is potential ambiguity of meaning?

The first question raises the problem if in a two-tone language one writes both the high (acute accent) and the low (grave accent), as well as falling and rising tones on a short syllable by the appropriate combinations of acute and grave accents. The general consensus is that one can leave one of these unmarked, either the low tone or the high tone. If tone is marked throughout the language, one could follow this approach: high tone marked, rising and falling tone marked, low tone unmarked (or vice versa: low tone marked and high tone unmarked). This means that any and all unmarked syllables are low (or high, according to the choice of system). Similarly, in languages with a three-tone system, low and high could be marked with a grave and an acute accent, and a mid tone remain unmarked.

However, in Bantu languages with longer words and hence a much lighter functional load of tone, especially in the lexicon, one may not want to write tone everywhere in the language. One may decide to write tone only to deal with semantic ambiguities, which means writing it on a number of lexical items and in particular grammatical constructions, but not on every word. Though this is probably the favored choice of tone marking in Bantu languages, there are a few drawbacks of which those who design orthographies should be made aware. These disadvantages become apparent when this method of tone writing to disambiguate semantically is combined with the system of leaving one tone unmarked, as explained above. The argument is the following: When, out of a lexical minimal pair or a grammatical

minimal construction, *one* item is marked to disambiguate (e.g., by a high-tone acute accent), the people may learn to read the marked one correctly. However, if while reading a text, they come across the unmarked word or grammatical construction, it is most unlikely that it would immediately occur to them that they have a choice: the unmarked one in front of them or the marked one. Since they would most likely not be immediately aware of this, they would probably at random pronounce either the marked or the unmarked one. Unmarked means in this situation to read the tone opposite to the marked one, whereas in most other words and constructions of the written language not marked for tone, it would mean: read any tone (i.e., the one that carries meaning). The solution to this problem would be to leave one tone unmarked only when tone is marked everywhere in the language, and to write all tones when tone will be marked only where there are potential ambiguities. I do not know of any languages that have applied this fully, but it would be worth experimenting with and documenting to serve as a guide for the development of tone writing in other Bantu languages.

4.3. Where should tone be written in Bantu languages?

I have not seen Bantu languages with tone written everywhere, though this may be done in some of the tonally more complex Bantu languages in Cameroon. Since at present the most likely choice is to write tone to disambiguate semantically only, the first step in the study of a language would be to list the areas where tone causes minimal distinctions and may have to be marked. Those who develop the orthography can systematically consider each point and make a decision on how to disambiguate the written forms.

I suggest the following procedure, which is valid in principle for all tone languages. First, compile a list of all minimal tone contrasts in nouns and verbs (in Bantu languages, most likely many more of the latter than the former). If the number of lexical tonal minimal pairs in the verb system is substantial, do some testing with full tone writing throughout the language. In addition, list all the areas of grammar where tone functions, to distinguish subject and object prefixes, verb aspects, relative clauses, etc. It is best to mark each one of a pair, writing both high and low tone in the language that has two tones. Lexical tonal contrasts, once marked in the orthography, should be listed exhaustively in an orthography guide, followed by an example of each of the grammatical constructions that require tone writing.

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5. THE TEACHING OF TONE

This section deals with the pedagogical approach to teaching tone. It suggests ways to teach people to read the tone marks once the analysis has been done and a decision has been made to write it in the language.

The teaching of tone reading is easiest when tone is written everywhere in the language, rather than at certain places only to disambiguate lexical and grammatical ambiguities, though similar principles are followed.

The teaching of tone reading is necessary for both beginning readers, and those people who have learned to read in a language of wider communication first, and who now need to make the transition to reading their own language, including the tone marks.

The principle is to always introduce tone in pairs, i.e., from a real minimal pair in the language. Following that, the learner, preliterate or already literate in another language, needs to have an exercise where he is forced to look at the tone marks without having anything else to *hang on to*. This can be done with an exercise with so-called *nonsense syllables* (or *nonsense words*). These are syllables that exist in the language, but carry no specific meaning. When four or five are put together in a *sentence*, the reader is forced to look at the tones only. In this way, both the already literate person and the preliterate will learn to read the tone marks. (Since the preliterate does not yet read any consonants or vowels, he just repeats the segmental part of the syllable from what the teacher says, and learns to look at the tone marks only). This method of tone teaching has been proven successful in a number of experiments both in West Africa (where tone was written with the punctuation marks) and in Eastern Africa (where tone was written with the accents).

In a language where tone is fully written, the teaching for preliterates needs to cover all the tone marks before moving on to the teaching of vowels and consonants (Figure 1.). When tone is written only sporadically to disambiguate, the teaching of tone can be done in special exercises presented alongside some of the vowel and consonant lessons, always being shown in contrastive pairs.

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Figure 1.

ddí ddì
ná nà

ná nà nà ná
nà ná ná nà
ná ná nà ná
nà nà ná nà

Figure 2.

chú chu
ná na

ná na na ná
ná ná na na
na ná na na
na ná na ná

bé	be
bbú	bbu
ché	che
djó	djo
ngó	ngo

pe	pé
cho	chó
nyo	nyó
li	lí
ndo	ndá

Figure 3.

le	Le ra ngo
lé	Lé rá ngo

ma	Ma ra bé be
má	Má ra be be

ke	Ke dji bbú ná
ké	Ké djí bbú nà

pe	
pé	Ni pepé
pě	Ní pěpě

After the initial introduction by a real minimal pair and an exercise with nonsense syllables or words, the teaching for literates can immediately continue with a list of real minimal pairs in the language (Figure 2.). This will reinforce the necessity to look carefully at the tone marks and raise the awareness of the function of tone in the language. This can be followed by short sentences containing each item of these minimal pairs (Figure 3.). It is often possible to create sentences that are the same, except for the inserted items. Since fluent reading becomes more and more guessing, it is good to force the learner to look closely at the marks indicating tone, so when he needs it, he has learned to recognize the mark and to pronounce the syllable or word on the right tone.

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In every case of tone teaching of which I am aware, it has been easiest to raise people's awareness of tone by first working with lexical minimal pairs. In this way, they learn the value of the tone marks first before tackling the minimal distinctions in the grammar. These also need to be taught systematically, however, so people will become aware of the tonal contrasts in the grammar of their language and can learn to read these distinctions easily.

6. CONCLUSION

This paper has provided observations and suggestions for those engaged in analyzing and teaching TONE. I have tried to bring together linguistic aspects of tone, which are a necessary prerequisite for the development of a good representation of tone in the orthography, and the pedagogy of teaching the reading of tone, which is a necessary follow-up once the tone orthography has been decided.

I have tried to give some specific focus to tone in Bantu languages, though the principles set forth in this paper are generally valid for tone systems of any African tone language. This paper was specifically written to raise the awareness of people concerned with orthography development of and literacy in the many tone languages of Africa. I hope that joining the linguistic background to the practical purposes of tone orthography and tone teaching will enable them either to do the necessary linguistic background work themselves, or to seek help from experienced linguists. In this way, a scientifically-based tone orthography can be developed capable of disambiguating at least all potential semantic tonal ambiguities.

My hope is that this paper may contribute in such a way that people may learn to read their languages more fluently without constantly having to guess and to reread. Then they will be able to read joyfully with understanding their own language, which is their heritage and is an expression of their ethnic identity.

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DESIGNING BRAILLE ORTHOGRAPHIES FOR PRIMERS

Lois Thar

Lois Thar is an SIL member who worked in Togo as a Braille literacy specialist from 1987 to 1989. This paper is from her M.A. thesis, Considerations for Braille Primer Design, of which the abstract appears in volume 18.2 of Notes On Literacy under the name Lois Wilson. Lois and her husband Rob are assigned to the Togo branch.

1. INTRODUCTION

Since the first braille code was designed for the French language in 1828, this six-point system has been adopted internationally as the standard writing system for the blind. Braille codes have been developed for at least 60 languages around the world.

The purpose of this study is to explore considerations for determining an effective design for a braille primer in any language. It includes an analysis of the instructional context in which the primer is used, and the design and presentation of orthography.

The study is timely because the incidence of blindness in third world countries is rising and governments are becoming concerned with offering services to those afflicted. The advance of linguistic work in many indigenous languages, as well as current technological advancements in the production of braille on computer, makes literacy for the blind possible now more than ever.

2. BRAILLE PRIMERS

Primer design depends on many factors. Service delivery models for instruction of the visually handicapped fall into two categories: segregated and integrated. In a segregated setting, usually a residential school, students from a wide geographical area come under a central administration and receive instruction by specialists in blindness education. Students also enjoy the benefit of the social support of others with the same handicap. The major drawback of this setting is the lack of a "truly normal social environment" (Merry 1933:67), where students tend to become so accustomed to the sheltered institutional life that, upon graduation, they have difficulty readjusting to life in the community.

The integrated service model is termed *mainstreaming*. Students live at home and attend regular classes at local schools. There they receive limited assistance from an itinerant or resident vision handicap specialist who helps them to do the same work as their sighted peers. Depending on the specific needs of individual students, placing them in an integrated setting is considered by most to be the "most enabling environment" (Scandary 1980). Various options are also available on a continuum between purely segregated and purely integrated. Worldwide, the trend is toward mainstreaming.

Several social factors may affect decisions on the development of instructional materials for the visually handicapped. Perhaps the most compelling is economy. A country with an average per capita income of $200 will provide fewer services for its population than a country with a per capita income averaging $12,000. National impoverishment may cause inferior equipment for producing educational materials, lower educational levels of instructors, fewer possibilities for training of instructors, and reduced communication between professionals.

Another social factor affecting service is attitude toward the handicapped. Depending on religious beliefs, a given group may consider the existence of a handicapped person as a blessing or a curse. Those considered a blessing are overprotected and those considered a curse are often neglected (Crespo 1989). In either case, services for the handicapped remain a low national priority, which means that the literacy level of the blind is proportionately low.

The linguistic environment is also important. In many cases, students have to learn braille in a second language (Crespo 1989). This is particularly true in developing countries where the print and braille orthographies of minority languages have not yet been standardized, thus requiring education in a language of wider communication. Students in such situations have the handicap of needing to overcome language barriers. Even where a minority language has a standardized orthography, often only a small quantity of literature is available for practice in reading.

Primers may be either intended for children or for adults, both sets of which include people with a broad range of background experience and exposure to education. Different motivations may also be seen among students of different ages. For instance, the elderly may only want to learn to read and write in braille to label their possessions, whereas the young depend on education for social advancement.

Differing abilities to learn are also apparent. The ability to adapt to a new reading medium may have decreased over the years for those advanced in age, whereas young children's minds are ready to capture knowledge in whatever form it comes. The ability to learn also depends on the reader's physical capacity to decipher written codes. For braille, this requires tactile sensitivity, which may or may not have decreased in adults through use of the fingertips for other occupations.

The results of a survey of organizations serving the blind conducted by Turner (1973) refuted the idea of an upper age limit for learning braille. More crucial factors than age are motivation, the need for braille, state of health, sense of touch, memory capacity, the ability of the teacher, and general attitude.

Bleiberg (1970) stresses that the primary concern in creating educational materials is that they be interesting and rewarding. These factors focus on the readability of a text. Gilliland (1972) describes the challenge of creating materials that are readable as a *problem of matching*. The skills and interests of the reader must be matched with appropriate literature from a range of topics and levels of difficulty, keeping in mind the need for comprehension, fluency, and interest.

The text designer has two options: convert a basal primer written for the sighted into braille, changing only the written code and the format, or start with nothing and create a separate primer entirely suited to the needs of the blind. Transcribing the primer for the sighted into braille is by far the simplest, most economical means of providing early reading material for the blind. The primer designer simply replaces the written script with the braille code, reformatting the text to meet the requirements of braille printing. The order of presentation of the code is the same as that for the Roman script, the story content is the same, and pictorial illustrations are either eliminated entirely, replaced with a verbal description, or replaced with a tangible model. Primers adapted from those designed for the sighted allow students to follow along with their sighted peers (Corn 1990).

Bleiberg (1970) promotes the use of original braille materials for their ease of learning and recommends their creative use in both integrated and segregated settings. He states, "The blind child should not have to learn to read a book just because it is used by his sighted classmates, but rather because it meets his individual needs and interests" (p. 137). While recognizing the advantages of using converted texts for use in integration, Bleiberg speaks for many in

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pointing out that this approach negates for the blind child all the considerations one normally makes in preparing instructional materials for beginning readers. Ease of learning is also promoted in a primer created specifically for the needs of the blind in that it stresses vocabulary and content appropriate for the conceptual level of the blind student. This encourages basing stories on topics which one can mentally imagine without sight. A primer based on the specific needs of blind readers renders learning easier because of its treatment of the unique features of the braille code, its appropriateness to the conceptual levels of blind students, and its illustration of story content.

Several features make the braille code different from Roman script. For example, reversals in print such as *b* ⠃ and *d* ⠙, which one avoids introducing at the same time, are not reversals in braille. Rather, reversals in braille, generally called *confusers* include *d* ⠙ and *f* ⠋ or *e* ⠑ and *i* ⠊.

Another feature of the English braille code that distinguishes it from printed English is that the braille symbol for the print digraphs is one sign, not two (e.g., *th* in print becomes ⠹ in braille, rather than *t* ⠞ plus *h* ⠓). With the exception of switching from written script to braille symbols, these orthographical differences are disregarded in primers converted from print to braille. It is better to teach and reinforce in the primer the problems inherent with the orthography the student will be reading.

The advantages of presenting the braille orthography according to its distinctive order of productivity are less compelling in languages where a system of contractions is not used. Problems presented by orthographic differences in these languages are limited to those inherent in the shape of the braille cells.

3. DESIGNING A BRAILLE CODE IN LIGHT OF SMALLEY'S CRITERIA FOR AN ADEQUATE WRITING SYSTEM

The perceptual aspects of reading, or the reader's ability to decode words or letters in the text, are key to the readability of a text (Gilliland 1972). Thus, in addition to considerations of spatial layout of a text, the text designer must give attention to the design of the braille orthography to ensure readability. The nature of the orthography will determine the order in which characters are presented in the braille primer and whether or not it is feasible for the braille primer to be based on the primer for the sighted.

Smalley's (1963) five criteria for an adequate writing system are:

1. Maximum motivation
2. Maximum representation of speech
3. Maximum ease of learning
4. Maximum transfer
5. Maximum ease of reproduction

Smalley's criteria are referred to here because they are often used as a standard when discussing new writing systems. These criteria are listed according to their order of importance as given by Smalley.

3.1. Maximum motivation

The first criterion of an adequate writing system is "maximum motivation for the learner and acceptance by his society and controlling groups such as the government" (p. 35). By this, Smalley means that the people responsible for preparing a new writing system should "adapt that writing system as much as possible to the cultural trends, to the prestige, education, and political goals which are likely to win out" (p. 36). For braille, this entails aligning the code with the print orthography for the language under study, as well as with the braille codes of neighboring languages and languages of wider communication, such as colonial languages from Europe.

One way of assuring that the code will come closest to meeting this criterion is the formation of a committee. Such a committee was formed in India in the 1950s to coordinate efforts to design codes within that country (Mackenzie 1960). A major decision facing the committee was whether Indian braille codes should be aligned to a central Indian code or to the International braille code. The same question was presented to a committee on Chinese braille. In both cases, the committees decided to design one uniform braille code for the country, to which codes in each language would be as closely aligned as possible.

3.2. Maximum representation of speech

Smalley's second criterion for establishing a writing system is maximum representation of speech. This concerns "an emphasis on the importance of accuracy of the correspondence between a writing system and speech" (p. 37). Decisions should be made on the basis of functional load, consistency, and redundancy.

In alphabetic braille, where every printed letter is represented by its braille counterpart, this is a relatively simple process whereby the

code designer assigns braille signs to the print orthography already in existence. Hooper (1951) cites the following three fundamental principles for devising any braille script:

1. Each sign shall be used, in so far as circumstances permit, for the same or nearly the same sound as in original braille, shall represent the same letter or shall fulfill the same or a similar function.
2. Except where the complexities of ideographic scripts make it impossible (such as Chinese, Japanese, etc., which are picture languages), a braille symbol shall be provided for each visual letter.
3. The spoken sound value of each braille symbol provided shall be identical with that of the visual letter of the alphabet of the particular language it represents (p. 208).

While maximal representation of speech in alphabetic braille is a relatively uncomplicated procedure, the connection is not as clear in contracted braille. In contracted braille, a single braille cell represents sounds signified by two or more letters in print. Contracted braille is intended to save space by reducing the characters required for printing high function sounds and words.

Under most circumstances, contractions accurately represent the speech of a language because they are based on the rules of the phonology and grammar of that language. In fact, it would seem reasonable by Smalley's standards that contracted codes include only high function words, or *functors*. A functor is defined as "a type of word that has a grammatical, but not a lexical meaning, as *in*, *the*, *or*. Function words are sometimes called service words, structure words, or high-frequency words" (Harris & Hodges 1981).

Kent (personal communication) cites the general practice among linguists of identifying as functors the fifty (approximately) most frequently used words of a language. Applying this determinant to establishing a contracted braille system eliminates many of the problems of such systems by limiting the number of contractions and insuring their productivity. The most frequently used content words could also be contracted as deemed reasonable.

The symbolization of diacritics, such as may be used for marking tone, nasalization, retroflexion, and elongation, may require special treatment. In French, the original braille code, a separate sign exists for each combination of diacritic and vowel (e.g., *a* ⠁, *à* ⠷, *â* ⠡, *e* ⠑, *è* ⠮, *é* ⠿). In most languages however, each diacritic has its own

symbolization. This is often achieved by using dots four, five, and six in various combinations according to patterns available in the language in question. The diacritic is placed adjacent to the letter it modifies (e.g., *a* ⠄, high tone *a* ⠔, nasalized *a* ⠤⠁).

3.3. Maximum ease of learning

The third criterion for establishing a writing system is maximum ease of learning. Smalley's descriptions of learning problems in various languages point to three principles in rendering an orthography easier to learn. The first is to include enough symbols to ensure that decoding is possible without heavy reliance on context, but not so many that the learner has difficulty remembering them all.

The need for maximum ease of learning through use of redundancy is key in the decision of whether or not to include a system of contractions in a braille code. Paske & Vinding (1973) list three reasons for the use of contractions in braille: (1) they use less space than full-spelling, (2) they render long words shorter, which makes them easier to read, and (3) they make writing faster.

The learning load is increased by contractions when there are so many that remembering them all requires a greater mental effort than recognizing each character (Williams 1945.) For example, reading a special symbol for the digraph *kp* may require more mental effort than simply reading the familiar letters *k* and *p* printed contiguously. In keeping with Smalley's principle, the key to facilitation of learning braille appears to be moderation in number of symbols (Bruteig 1987; Paske & Vinding 1973). This principle of moderation applies to the orthography as a whole, including the alphabet, contractions, and punctuation.

The second principle in maximizing ease of learning is to provide as much contrast between symbols as possible to avoid confusion. Little variety of contrast is possible given only six dots to choose from in braille, which is a problem for new readers of braille. This should, however, be addressed in prereading material. Also, as Smalley points out concerning contrast:

> This is all part of the learning problem, but it is encouraging that at this point a carefully constructed primer with adequate drills can overcome the difficulty much more easily than some of the more fundamental problems we have discussed earlier (p. 43).

The third principle in maximizing ease of learning is to handle similar problems consistently. For instance, Smalley advises using as few symbols as possible in representing one single sound, being careful to symbolize the same type of sound in the same manner throughout the orthography. In this, the braille code designer will follow the pattern already established by the linguist in designing the inkprint code. In the example of *kp*, if the designer decides to contract *kp*, then *gb*, its voiced equivalent, should also be contracted.

3.4. Maximum transfer

The fourth criterion in creating a new writing system is maximum transfer:

> Having learned to read his native language, a reader should be able to learn to read the trade or national or colonial language of the area with as little difficulty as possible in the transference of the value of the symbols (Smalley 1963:44).

Transference from the print orthography of the language to braille orthographies of other languages is important. Both blind students and sighted helpers benefit from direct correlation between print and braille. Students benefit because it increases their ability to spell when they need to communicate with sighted readers (Williams 1945). Sighted helpers benefit from this direct correspondence because they do not have to learn a contracted code in order to work with the blind (Corn 1990). This eliminates many of the problems in integrating blind students into programs for the sighted.

Maximum transference to braille orthographies of other languages benefits both mother tongue readers of the new writing system and readers of other languages who may wish to read in the newly written language. To discourage braille code designers around the world from "doing their own thing," Mackenzie (1960) advocates an international code whereby "the same letter or the same or nearly similar sound of a letter should everywhere be represented by the same braille character" (p. 15). This system promotes communication between blind readers of different nationalities and facilitates production internationally by providing maximum transference among all codes.

Mackenzie's proposal proved to be too idealistic because of the braille literary traditions already established in several languages and because of differing social factors present around the world (Advani 1947). However, the *same sound, same sign* philosophy has brought about three positive developments in what is termed *World Braille*

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(Hooper 1951). One is that an international phonetic braille alphabet has been developed as a standard to which new alphabets are compared (UNESCO 1990). Another is that the idea of *similar sound for same sign* has been adopted on a continental basis, where code designers often work in languages of the same linguistic family. A third positive development is that code designers are more careful to avoid using one symbol for different sounds in different languages.

While transference between braille and print is helpful, this may or may not be the case in transference between international braille codes. Having contractions in local languages may help transference into international languages. Aucamp, chairman of the South African Braille Committee of the South African National Council for the Blind (personal communication 1991), believes that having contractions in the mother tongue familiarizes students with that concept and thus helps prepare them for encountering contractions in European languages. She stresses that this is for the student who will advance academically rather than one who will not likely progress beyond the basic literacy level. For those students, she writes, "literacy is more important than a code of contractions."

Carey, of the Royal Commonwealth Society for the Blind (personal communication 1991), agrees from the standpoint of the needs of primary students in underdeveloped countries. In the argument over contractions in indigenous languages, he points out that students of indigenous and colonial languages "really have better things to do with their time" than learn a system of contractions for both languages.

The discussion of whether or not having a system of contractions aids transfer apparently hinges on whether or not the designer of the new braille code expects readers to need to read materials from languages with contractions. Hooper (1951) expects that most students will need to read materials from other languages, no matter where they live. Literature in European languages is much more abundant than in less dominant languages and is often distributed free of charge. If this is the case, then development of a contracted code in a new braille writing system would be in keeping with Smalley's fourth criterion.

3.5. Maximum ease of reproduction

Smalley's fifth criterion for establishing a new writing system is maximum ease of reproduction. Smalley considers this to be the least important criterion, but concedes that in light of the need for economy in many circumstances, "When the considerations listed above have

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been satisfied, that way of printing, that choice of symbols, which is the easiest to type and print is the best" (p. 45).

Since the braille cell is composed of only six dots, complexity in producing the printed cell is not an issue. What has become an issue in meeting this criterion concerns the adaptation of codes for use on computers. Since computers can eliminate the tedious job of hand-producing braille texts and can provide perfect master copies, this consideration is crucial in the efforts to provide literature to the blind (Kadoya 1983).

Maximum ease of reproduction on the computer is complicated by contractions, but not made impossible by them. Contractions complicate computer production because of the complexity of programming the rules that govern them (Cohen 1981). Kadoya (1983), who produces Biblical texts on computer for the Word of Life Press in Tokyo, Japan, did not consider this a problem. Nilsson (1983), on the other hand, sees that attempts to reproduce braille texts on computer will only be hindered by the use of contractions. He summarizes:

> With the appearance of these techniques and the possibilities for automatic transfer of printed material from computer-readable media, the braille reader will have almost unlimited access to printed material. However, these systems require the acceptance of uncontracted braille if they are to achieve widespread use. Of course, it is perfectly possible for a computer to handle contracted braille, but not without extra software, which makes production much more expensive and takes more time (p. 12).

Even with such clear guidelines as Smalley offers, the designing of an *adequate* braille writing system is a demanding process. It must take into consideration international and national criteria, needs of students and teachers, and requirements of users and producers. Furthermore, even a well-designed writing system will need to be updated periodically to reflect the development of the language.

4. DECIDING THE ORDER OF PRESENTATION OF ORTHOGRAPHY

The aim of a primer is to make the early reading experience successful by presenting the orthography in such a way as to provide sufficient familiarity with each new element before the next is presented (Porter 1991). Smalley (1963) made the point that a well-

designed primer can help a student to overcome problems inherent in the most difficult orthography.

This is possible if the designers of the material do an in-depth analysis of the braille code of the language to make an inventory of the elements within the code that must be presented. The analysis would include a measurement of the productivity of each element, combined with an assessment of the order of difficulty of elements within the code (Hamp & Caton 1984). They could then apply this knowledge in deciding the order and rate of presentation of elements.

Lee (1982) recommends taking an inventory of elements to be taught as a preliminary step to ordering lessons. This refers to letters (e.g., consonants and vowels, digraphs, letters from other languages), letter positions (e.g., syllable initial and syllable final consonants), functors (e.g., pronouns, prefixes and suffixes, conjunctions, articles), functor positions (e.g., word initial or word final), and structural conventions in writing (e.g., punctuation, diacritics, capitalization, headings, continuing a sentence on the next line).

Ashcroft (1960) identifies seven categories of the braille code based on his study of errors children made in reading English braille. His grouping of braille categories and the order of difficulty ascribed to each was used as the primary determinant of the order of presentation of vocabulary for the *Patterns* series (Caton et al. 1979). Caton and Bradley (1978) describe these categories (p. 68):

1. Alphabet abbreviations: single letters of the alphabet which stand for a whole word
2. Full-spelling: words fully spelled out, using no contractions
3. Upper-cell contractions: words and contractions which contain dots in the upper part of the cell (dots 1 and/or 4)
4. Lower-cell contractions: words and contractions that do not contain dots 1 and/or 4
5. Combinations of orthography: words containing combinations of upper-cell, lower-cell, short-form words, and multiple-cell contractions.
6. Multiple-cell contractions: whole-word contractions made up of two or more cells, or words which contain part-word contractions made up of two or more cells
7. Short-form words: contractions using from 2 to 6 letters to represent a word.

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5. CRITERIA FOR DETERMINING THE PROGRESSION OF LESSONS

Information on the productivity and the level of difficulty of elements of a language provides the criteria for planning the progression of lessons in the primer. This information does not dictate the order of presentation, but provides guidelines used by the text designer to compose lessons helpful for the learner.

The productivity of an element is its usefulness in building meaningful stories together with its frequency of occurrence in the language. The more frequently an element occurs in a language, the more useful it is in building content. Nolan and Kederis (1969) found that the constructions most easily recognized by readers are those which occur most frequently in the language. This naturally occurring process can be reinforced by presentation of elements in primer lessons according to productivity.

In addition to the productivity of elements within the braille code, consideration must be taken of the difficulty of recognition of the braille constructions. For example, one would not introduce two similar characters at the same time, regardless of their productivity, because this would confuse the reader.

Two general concerns are legibility and length.

Legibility. Legibility in braille refers to the ability to discriminate tactually the different braille cells. Ashcroft (1960) ranks the legibility of braille cells according to the type of errors students make in reading them. He gives three types of errors: errors in perception, errors in orientation, and errors in interpretation.

Errors in perception include missed dot, added dot, and ending errors. These all involve a misreading of the dots in a cell. Millar (1986) found that braille readers use certain texture cues to discriminate shapes with their fingers. This texture is formed by *dot density* or *dot numerosity*. Gross differences in the number of dots in braille cells aid shape discrimination. Nolan & Kederis (1969) found that the amount of open space in a cell is more significant than the number of dots in the cell. Both studies found that cells composed of dots in the upper two rows (⠉ dots 1, 2, 4, and 5) are easier to recognize than those composed of dots in the lower two rows (⠒ dots 2, 3, 5, and 6).

Errors in orientation include reversal errors, vertical alignment errors, and horizontal errors. Reversal errors involve a rotation of the braille configuration (e.g., *e* ⠑, *i* ⠊; *m* ⠍, *u* ⠥). Vertical and horizontal alignment errors involve up-down or left-right faults in orientation (e.g., *d* ⠙, period ⠲; and *a* ⠁, high tone ⠄). This may also take place between adjacent cells (e.g., *l* ⠇ plus *a* ⠁ might be confused with *p* ⠏).

Errors in interpretation include association errors and gross substitution errors. Gross substitution errors are "errors which are so evidently meaningless as responses to the stimuli which elicited them that they seem to have no logical relationship to braille orthography" (Caton et al. 1979:28).

Length. In addition to examining the legibility of a character to determine its level of difficulty, primer designers also consider its length. Williams (1945) cites the common practice of introducing short words first, followed by progressively longer words. Nolan & Kederis (1969) found that recognition times for braille words increase with the length of words. Craig (1975) prefers presenting words of varying length to aid perception and interest.

Elements in a well-designed contracted braille system have a high level of productivity and thus might be selected for early introduction on that basis. However, the level of difficulty of contracted braille is greater than that of alphabetic braille because of the greater number of interpretation errors made in reading (Caton et al. 1979).

6. DETERMINING THE ORDER OF PRESENTATION

The debate is whether to teach both alphabetic and contracted braille from the very beginning of reading instruction or to teach contracted braille only after a firm basis in reading alphabetic braille has been attained. Some educators prefer not to teach contractions at all. Primer designers must also decide when to present punctuation and composition signs. The conclusions primer designers reach on these issues will affect the form of their primers more than other issues, governing the content of every lesson.

The argument for introducing alphabetic and contracted braille simultaneously from the beginning of instruction is based primarily on the equal level of productivity of both categories. Since a well-designed contracted system should consist of the most frequently used words or parts of words from a language, they would be just as crucial to the make-up of a meaningful story as would the individual letters of

the alphabet. An important part of this argument is that it is *inefficient* to have the students learn to read words in a form in which they do not appear in literature (Whitesell 1988).

Harley, Henderson, and Truan (1979) consider it important that students early build up a *repertoire* of sight words that they recognize instantly from early instruction. High function words compose a large portion of this repertoire and appear in a contracted system. The words in this repertoire are those most familiar to students and thus the most easily recognizable. Therefore, by introducing contractions from the beginning of instruction, the primer designer is fostering more rapid reading in the student.

Those who advocate teaching contracted braille after alphabetic braille do so because they believe that the higher level of difficulty of contracted braille is inappropriate for beginning readers. The blind in underdeveloped countries often do not continue in academics after primary school. These students have little need for contracted braille, assuming that primary literature is available in the language in alphabetic braille. This also assumes that students will not change their academic course during the direction of their schooling.

Troughton (personal communication 1991), a braille teacher in Canada, supports this premise. She adds that contracted braille should only be taught to those who have proved their reading ability through mastery of alphabetic braille. She estimates that ninety per cent of her students read and write faster and more accurately in alphabetic braille. Only about one fourth of her students go on to learn contracted braille.

Troughton considers contractions to be beneficial to a few, but detrimental to many. She stresses the importance of considering the needs of struggling students when ordering early braille reading materials. Troughton states, "Those most harmed by contracted braille include those with learning disabilities, a second language, and poor touch sensitivity."

Another concern is that those who learn contracted braille from the beginning of instruction have more difficulty learning to spell properly since they have only learned the abbreviated forms of words (Johnson 1989). Nilsson (1982) claims that the advance of technology makes use of contractions obsolete:

> Contracted braille was invented when Louis Braille realized that it was necessary to do something to reduce the bulk of braille and the time needed to write it. But luckily, times have

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changed. Now, we have writing machines with which we can write even uncontracted braille very quickly (Nilsson 1982:196).

The changing nature of language requires frequent revision of contractions, rendering materials inaccessible to an ever increasing number of readers after the revision (Nilsson 1983). According to Nilsson, the only valid use for contractions in contemporary society is taking personal notes, for which the braille user can invent a personal code.

Punctuation and composition signs of the braille code are termed *modulations*. "What they have in common is that they *do things* to, that is, have effects on, other elements--the segmental elements--in the chain" (Hamp & Caton 1984:213). Punctuation has print values that are sequential in position and either *look back on* (e.g., period), *enclose* (e.g., parenthesis), or *link* (e.g., hyphen) the elements they affect. Composition signs, referred to as *register*, *look forward* or affect the elements that follow. They include the capital, italic, letter, and number signs. According to this definition, diacritics such as tone and nasalization markings are register markers or composition signs.

The problem of balancing the importance of productivity against the level of difficulty is clearly evident in decisions involving the presentation of modulations in braille. By virtue of their productivity, they should be introduced in the first lessons; however, their level of difficulty requires that they be introduced much later.

In Ashcroft's order of difficulty of the categories of the English braille code, punctuation marks fall in the fourth category of lower-cell words since they are formed in the lower two rows of the braille cell (Caton et al. 1979). Characters in this lower position are more difficult to distinguish than those in the upper part of the cell. Composition signs are composed principally in the right column of the braille cell. Both types of characters are subject to alignment errors of orientation (Caton et al. 1979). This causes confusion between these symbols and those for letters (e.g., f ⠋, ! ⠮, c ⠉, : ⠒, - ⠤; italics sign ⠨, l ⠇). Because of the tendency to confuse modulations (punctuation and composition signs) with letters, many educators recommend delaying their introduction as long as possible.

7. CONCLUSION

The overall context of the instructional program has a great impact on the design of the primer. Whether or not a program for the blind includes mainstreaming is a deciding factor in the option chosen for

the design of the primer series. The implication is that the learning task is made more difficult for all but the most intelligent students when the design of the braille primer is based strictly on the design of the primer for the sighted rather than on the specific needs of the braille reader.

This does not imply, however, that braille primers based on primers for the sighted can never be successfully used and therefore should never be produced. In fact, this may be the best option in mainstreaming situations, especially if supplementary materials can be provided. Several programs do not even use published primers, but rather create individualized materials for their students. This may be the best option when resources are available.

The preferred design for a primer appears to be one created specifically for the learning needs of blind students. It is not sufficient to simply transliterate a primer for the sighted into braille, which is a common practice and certainly the easier choice.

The content of a braille text should be such that it includes subjects that fall within the conceptual framework of someone who has no experience with the visual world. Also, since braille is a different orthography than its printed counterpart in a language, the order of presentation of its elements should be based on its specific features. This is especially true if a system of contractions has been designed for the braille orthography of the language.

The strongest implication in the area of orthography has to do with the number of contractions that might be included in the braille orthography of a language. In keeping with Smalley's criterion of designing an orthography for maximum ease of learning, several educators recommend that new orthographies include only a moderate number of contractions.

This paper has served to provide an overview of some of the issues involved in designing and producing a braille primer in any language. It has explained and compared practices and opinions of braille educators both in the United States and internationally. It is hoped that this overview will help braille primer designers in their decisions as they create new beginning reading materials in their educational context.

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AN ACCOMMODATION OF A GLOBAL LEARNING STYLE TO SIL TRAINING IN BRITAIN

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1. INTRODUCTION

The study of learning styles has come to the fore, mainly in the last twenty years. An alternate term for this concept is *cognitive style*. It refers to the way in which the brain perceives and processes sensory information in an individual, and to the practical outworking of this in the particular style used in learning situations. The different learning styles have nothing to do with intelligence per se, and no one style is inherently better than another. They each have their strengths and weaknesses. The way in which new material is presented and the teaching strategies used can make a great difference in an individual's ability to grasp and learn what is being presented. In this paper, I look briefly at research on learning styles and outline the Learning Styles Project at the British SIL School.

2. LEARNING STYLES RESEARCH

Researchers use varying terms to describe the two main learning styles. Herman Witkin (1969) terms the linear thinker *field independent* and the global thinker *field dependent*. This highlights the personality traits that tend to accompany each learning style. *Field independent* thinkers tend not to be influenced by their learning context and situation. They approach learning in an impersonal, task-oriented manner, tend to be more individualistic and competitive, and are motivated by internal factors. The *field dependent* learners, on the other hand, are more influenced by the learning environment. They find it helpful to have pleasant surroundings and a relaxed atmosphere, and are more easily distracted by noise and the demands of people outside the particular learning situation. They tend to be more people-oriented, cooperative in learning, and influenced by the

ideas of others. External feedback, both positive and negative, are important motivating factors.

David Kolb (1984) identifies four modes of the learning process: *concrete experience, reflective observation, abstract conceptualization,* and *active experimentation.* Concrete experience and abstract conceptualization have to do with the way in which individuals perceive information. This dichotomy between the concrete and abstract corresponds with right-mode and left-mode brain functioning. Kolb introduces the extra dimension of whether the information is processed in a reflective or active manner. Reflective learners value patience, and impartial and considered judgment, while active learners emphasize *doing* as opposed to *observing.*

Bernice McCarthy (1980) believes individuals should develop learning skills in each of Kolb's four modes and that each learning experience should move around the learning cycle covering aspects of each mode. The first mode emphasizes a *divergent learning style.* These are imaginative learners who are good at brainstorming and are interested in people. Their favorite question is "Why?" The teacher acts as motivator for learning and creates a reason for learning. The second mode emphasizes an *assimilative learning style.* These are analytic learners who can create theoretical models, and are more concerned with abstract concepts and ideas than with people. Their favorite question is "What?" They look on the teacher as information giver. The third mode emphasizes a *convergent learning style.* These are common sense learners who are good at problem solving, decision making, and practical application of ideas. They prefer dealing with technical tasks more than with social issues. Their favorite question is "How does this work?" They look on the teacher as facilitator and coach. The fourth mode emphasizes an *accommodative learning style.* These are dynamic learners, actively carrying out plans, and are risk takers, discarding theories if they do not fit the facts. They rely heavily on the analytical abilities of others, and often seem pushy and impatient. They ask questions such as, "What can this become? What can I make of this?" The teacher is seen as evaluator. These are interested in passing on their skills to others.

Pask and Scott (1972) did an experiment that involved preparing a teaching programme for *serialist* and *holist* learners. These two categories are yet other terms for the left-mode, right-mode distinction. They taught a serialist programme to both serialist and holist learners, and a holist programme to holist and serialist learners.

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Their results showed that learning was most successful when serialists followed the serialist programme, and holists followed the holist programme. They also discovered marked differences in the way in which each group taught back what they had learned. Serialist learners reported back the material in the same order in which it had been given, and were able to give the essential outline of what had been learned. Holists, on the other hand, had somehow made the information their own, and reported back what they had learned in an order that made sense to them and contained much redundant information.

3. THE LEARNING STYLES PROJECT IN BRITAIN

The importance of learning styles in training came to our attention in British SIL in the mid-1980s. Students came through each year who were intelligent, capable people in their own fields, but performed poorly in the linguistics courses and came out demoralized. Clearly there was a problem. Gloria Kindell observed the problem and compared it with experiences she had in Brazil. She believed that part of the problem was a mismatch between the analytical teaching style of the course and the different learning style of some students. A learning styles project was set up that offered two approaches to the learning of linguistics in the first SIL course, the General Course. The original approach was renamed the *linear approach* and the new approach was termed the *global approach*.

The students were streamed into the two approaches in the following way. During the first three days of the General Course, the students were given lectures on learning styles, outlining their importance both for the individual learner and for the training work in which they may be involved in the future. Pen and paper evaluations were given to help both them and us come to a decision about which approach they should follow during the course. Each year about six different evaluations of different types were given. Some were solely based on discovering their preferred learning style and others included some personality factors, since personality traits correlate with different learning styles. If a consistent pattern came out across the evaluations, this was a good indication of their preferred learning style. At the British SIL School, we have many students whose mother-tongue is not English. We tried to have at least one evaluation that was not dependent on langauge and vocabulary. We discarded any evaluations that required an in-depth knowledge of English. As staff, we gave feedback to the students concerning which approach we

recommended that they follow. No one was pressured; each made his or her own final decision.

The teaching strategies for the global approach aimed at covering the following four main strategies: (1) giving an overview of the whole picture before teaching small parts, (2) contextualizing the subject matter, (3) modeling the concepts, procedures and material to be learned, making explicit the steps involved in analytical procedures, and (4) paying attention to the group atmosphere and learning environment.

The first global teaching strategy was to provide an overview of the course. Since one of the characteristics of right-mode perception is the ability to perceive the whole picture, it is very helpful for a global learner to be given a view of the whole picture before concentrating on any small parts.

Global students have, in the past, experienced difficulty with SIL courses. They have found it frustrating to be presented with examples from many different languages aimed at teaching just one point at a time, not knowing where the individual parts are leading. To improve on this point, an overview of the course was given at the beginning, informing students of the individual subjects, something of their contents, and how they relate to each other. Ideally, students receive an overview at the beginning of each lesson to explain what will be covered during that particular session. Many global students ask for a manual to cover each subject of the course, but we have given hand-outs each day that built up to the manual by the end, because global learners often feel swamped when too much material is given at once.

The second strategy focused on in the global approach was the need to contextualize the learning material. Global learners, because of right-mode processing, deal best with concrete material that can be pictured and with material that has to do with the *here and now*. It is necessary for them to understand the relevance of what they are learning in order to be motivated to learn. They like to personally identify with what they are learning.

For the first three years of the experiment, Geoffrey and Rosemary Hunt of the Hanga programme in Ghana gave several hours of lecture on their programme from start to finish. They showed how all that they had learned at SIL fitted in and worked together. This helped give the big picture to the students, and aided in contextualizing the course. In the last two years, students heard three or four shorter presentations of different types of programmes. This approach helped

them see the importance and relevance of what they would be learning as they aimed toward the end product.

The third teaching strategy followed in the global approach was to model the concepts and material being taught, making explicit the steps involved in analytical procedures. Globals learn best if shown how to do something, rather than learning by trial and error. For each new concept, the teacher went through the procedure to follow. Next, the students worked through a similar example with the teacher. Finally, the students did a similar example on their own to make sure they had grasped the new concept. The example the students do on their own should not require a leap of knowledge beyond what was taught in the previous two examples. Once the students can do this example on their own, they will have grasped the concept and can then use it freely in any new situation. If any students cannot do the third example satisfactorily, they need other similar examples to do until they can do it alone. This is an important point. Globals learn something by observing how to do it followed by working through examples, reading about it, or discussing it with others. Complex charts and diagrams tend to be difficult for globals to process. Charts should be as uncluttered as possible, and teachers should explain the way they should be understood.

The fourth important aspect of global teaching is the need for a good group atmosphere and learning environment. As noted in the personality traits that Witkin identified in field dependent learners, the learning environment is very important. The lecture room should be arranged in such a way that it encourages group participation. The desks should be in a circle or semi-circle, rather than in straight rows facing the front. It should look pleasant.

Global learners need a tension-free atmosphere to facilitate learning. When students become tense, they cannot concentrate on learning new material. The teaching technique of asking questions of particular students, used to good effect with linear thinkers, is not useful for global learners. Questions of a general nature may be asked, though they are not particularly helpful for globals until the new concept is really understood. Globals learn best by being taught new material, not by being asked questions about what they do not yet know. They do not learn well by trial and error. Also, knowing that one of them is going to be singled out and asked a specific question leads to a tense atmosphere not conducive to learning. If the atmosphere is comfortable, the global students will often ask questions.

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Many global learners like to discuss their work together, which helps them clarify their thoughts. Others, however, find this less helpful, so we followed the pattern, for many assignments, of letting the students talk together if this were helpful, or to take the assignment away and do it in their room if they prefered to be alone.

Team-teaching was another strategy tried to accommodate global learners. Some of the staff found the idea of team-teaching strange at first, and some found it threatening, but most, if not all, came to appreciate its strengths before the end of the course. Some global staff, who themselves were taught with linear strategies, found it difficult, at first, to think of presenting material in a way different from how they learned. Over the years, however, they became more open to changing their teaching strategies.

4. RESULTS

We did not find it helpful to compare the global students with the linear students in the General course. However, students who expect to do translation or literacy work go on to take the Field Methods Course. This course contains a language project that puts into practice the knowledge gained in the General Course. In the Field Methods Course, the students all learn together. We hypothesized that if the global students had grasped well the concepts learned in the General Course and could do linguistic analysis, and if intelligence does not correlate with learning style, then the grades of the global learners in the Field Methods Course should have a distribution similar to those of the linear students.

Grades are given in the Field Methods course for grammar, phonology, data management, and language learning. The grades showed a good mix between the linears and globals in all four subjects, showing that globals can handle analytical subjects. Since there is a clear mix in the overall grades, both types of thinkers can do well in any of the subjects.

Two years ago we noticed a disadvantage in keeping the two approaches so separate. The linears became a very competitive group and really did not enjoy their learning. The globals, on the other hand, would have benefitted from seeing how the linears analyzed the material. If kept together more, each type would sometimes be frustrated, but it would have helped them to develop in their weaker areas.

5. LESSONS LEARNED

How we are taught tends to be the way that we will teach others. We need to examine our own style, how we were taught, and whether it was according to our preferred style. Then we need to observe the style of those we are going to train, and how the teaching can be made most appropriate.

Global learners need to be given the "big picture" before they learn the parts. They need to know the relevance of what they are learning so it will make sense and they will be motivated to learn. It is helpful to build in plenty of practical application of the new information and give many similar examples. This may require more time. They often need to work through a new concept on their own to prove to themselves that they understand and can apply the new knowledge. Global learners may lose confidence when the only comments on assignments are negative, so it is helpful to also find something good to say to encourage them. Global learners take time to assimilate new information.

Global thinkers tend to learn better by comparing similarities rather than differences. This has an important application in the choice of literacy methods to use. Many literacy methods are based on looking for contrasts rather than similarities. I have only briefly touched on the application of learning styles to the choice of the literacy method to be used in any particular community, but this is an important area in which to apply the principles learned.

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ABSTRACT

Wendell, Margaret Mae. 1978. Training authors in a preliterate society. M.A. thesis, University of Texas at Arlington. (*Available from the editor, Notes on Literacy*)

As one of SIL's early literacy specialists, Margaret (Peggy) Wendell worked in several language groups in Mexico principally in government programs. She initiated indigenous writer-training courses, holding workshops in five countries. She was editor of Notes on Literacy for several years. Her book, Bootstrap Literature, is based on her master's thesis.

Preliterate societies still exist in the midst of highly literate societies. An unwritten language, lack of formal grammars and written literature mark these societies as social misfits by dominant cultures. Literacy programs aimed at changing social and economic status often disregard the matters of language, cultural reference, and misconceptions of the relationship of language and writing. The results too often are program failure.

This book seeks to present an answer to the questions of how to go about changing a preliterate society to a literate society: by stimulating the production of interesting, cultural reading material from within the local society itself, written by one or more of its members, in the local language.

Individuals or teams trained in linguistic procedures can be the key to training writers and through them to bringing change, from preliterate to literate. For several years the Summer Institute of Linguistics has had a number of such teams at work among preliterate people in various countries. However, not until 1970 did the Summer Institute of Linguistics engage in a concerted program to produce indigenous literature. Since then some fifty workshops in fourteen countries have been held for the purpose of training indigenous writers. Reports from some of these workshops, from individuals, and the writer's own experience form the basis for the book.

The book was written in an effort to bring together both rationale (treated in Part I) and procedure (treated in Part II). Over the past years a fuller understanding has developed as to why indigenous authorship should be encouraged, and as to the importance of attitude and cooperation by trainer, community, and trainee.

Although most training has been done in a formalized way (workshops), the informal training, done in the trainee's locale, may be

preferred. It is recognized, however, that certain psychological factors may favor the formalized procedure.

Results of training indigenous writers and the effect of indigenous literature upon a community are examined from the perspectives of the trainee, the community, the national educator, and the linguist who sowed the first seeds by training or helping to train the first writers. The procedure is found to be highly favorable to all four entities, although not without problems which are also pointed out. These deal principally with logistics and economics of material procurement, production and distribution. Problems of writers continuing to write are also noted.

The second part of the book deals with specific procedures in formalizing training, and is likely to appeal principally to those with responsibility for workshop direction. The four chapters of Part II deal with questions such as: single language workshop versus multilanguage; the advance planning, preparation and notification of an upcoming workshop; how the trainee is taught, with specific suggestions for classes, excursions, topics for eighteen discussion periods, and details of how to instruct a naive trainee in the preparation of stencils for a multi-page booklet; with focus upon the linguist who may not have had training in literacy, suggestions and outlines are given concerning topics for twelve seminars dealing with literacy programs, models of the reading process, the affective model of reading, and consideration of the particular country's language planning and education policies.

An extensive reference list is included which should also be of help to readers who are interested in a deeper understanding of the sociolinguistic and educative implications of training indigenous authors.

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REVIEWS

Ways with words. By Shirley Brice Heath. Cambridge University Press, 1983. Pp. 420. $65.00. Paper $24.95.

Reviewed by Martha Lester

Have you been looking for that hard-to-put-down book that combines ethnographic adventure and practical principles for educators around the world? *Ways with Words* is a powerful, poignant account of two communities in the Piedmont Carolinas. The two communities, Trackton (a black working-class community) and Roadville (a white working-class community), are very close in physical distance but are far apart in their cultural and communication patterns. These differences between children of Trackton, Roadville, and "the townspeople" affect their "schoolin' to get ahead" and challenge their teachers.

Shirley Brice Heath, a professor at Stanford University, masterfully uses her anthropological expertise to draw the reader into the intimate cultural worlds of both Trackton and Roadville. I was impressed by her decade-long stay in the Piedmont area while collecting data plus her intimate acquaintance with such diverse groups of people during this lengthy time span.

Part I (Chapters 1-6) tells how children of two culturally different communities in the Piedmont came to use language, and it gives the interesting background history of the communities. Part II (Chapters 8 and 9) relates how their teachers learned to understand the children's ways and to bring their ways into the classroom.

Chapter 3, "Learning How to Talk in Trackton," and Chapter 4, "Teaching How to Talk in Roadville," were invigorating chapters of special interest. The chapter titles themselves give the reader a good idea of the prevailing attitudes toward language use by children in the two communities. Different concepts of childhood result in different forms of communication, as the following examples show.

Children in Trackton are always in and around the stream of adult communication, both verbal and nonverbal, from the time they are born. They are not talked *to*, however, until sometime around the age of one, when boys and girls are talked to in quite different manners. Boys are "challenged," while girls are not really talked with by adults until around 24 months of age. Trackton adults believe a baby "comes up" as a talker and that adults cannot make babies talk. Therefore,

the adults do not repeat utterances, announce labels, or place words in expanded phrases.

In Roadville, parents speak of "bringin' up their youngsters," talking to their babies as conversational partners. Children in this community learn to label and name attributes of real world and book objects; parents expect children to answer questions in a specified way. Parents see themselves as trainers of their pre-school children. Roadville children learn to interpret and tell others the rules they live by. In Trackton, like Roadville, the church plays an important role in reinforcing the language use patterns that go on in families and neighborhoods.

Chapter 5, "Oral Traditions," shows that people in both communities spend much time telling stories; but the way in which stories are told varies a great deal from Roadville to Trackton. In Roadville, telling the absolute truth, reality, and having an ultimate moral or lesson to the story is important. Trackton residents, however, use reality as the seed for greatly exaggerated, embellished, creative accounts. Roadville residents use stories to reaffirm group membership and behavioral norms, while Trackton folks use them to assert individual strength and power. Examples of language use, detailed texts, and conversations enhance the reader's feeling of actually being in the plaza amidst the Trackton players or in Roadville at a church function.

Of the valuable insights I learned, one of the most important was the following:

> Therefore, any reader who tries to explain community contrasts in this book on the basis of race will miss the central point of the focus on culture as learned behavior and on language habits as part of that shared learning. Children in Roadville and Trackton came to have different ways of communicating, because their communities had different social legacies and ways of behaving in face-to-face interactions. In other parts of the world, different social legacies and ways of behaving can also be found between villages or communities located only a few miles apart (p. 11).

What an invaluable concept to help us in our learning about one another and other communities and cultures!

This book is for learning researchers, academics, teachers, parents, and community members. If you are an educator of any kind or are

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contemplating cross-cultural work, this book should be a delightful *must* on your future reading list.

Basic processes in reading: Visual word recognition. Edited by Derek Besner and Glyn W. Humphreys. Hillsdale, NJ: Lawrence Erlbaum Associates. 1991. Pp. 350. $49.95. Paper $24.95.

Reviewed by Joy G. Bodine

The release of *Basic Processes in Reading: Visual Word Recognition* reflects the growth in research of the actual processes of visual word recognition. It is a collection of essays that covers some major issues in word recognition by researchers in neurophysiology, visual perception, cognition, and reading. Topics include parallel processing, phonologic mediation, word frequency effects, and semantic priming.

The first chapter is an overview by the editors, Derek Besner and Glyn W. Humphreys. They find several sociological and pragmatic reasons for the recent growth in research. New technology makes it easier to measure simple reading tasks and to see the link between eye movement and higher-order cognitive processes. The editors note that though problems exist in reading research, it has led to improved means of reading disorder assessment and correction. The chapters that follow cover most of the major topics in recent research and highlight questions that still need to be answered.

The second chapter explores the processes that occur in the reading of handwriting. The process of reading handwritten words as opposed to typewritten words must consider that handwriting is composed of connected letters of variable shape. There have been two approaches to machine reading of handwriting. In the first approach, the machine attempts to read the whole word, but this has not been successful. In the second approach, the machine first segments the words into letters, and then tries to recognize the letters before decoding proceeds as for typed material. The authors posit that human reading of handwriting follows the same process as does machine reading. The experiments discussed in this chapter support the hypothesis by showing that a "specialized cursive normalization" process occurs separate from and before other processes of word recognition. Exactly how the process of cursive normalization occurs is still unknown.

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Chapter 4 uses evidence from proofreading to discuss the phonologic mediation hypothesis that phonologic codes are primary to word identification. In experiments, subjects were asked to proofread quickly stories with two types of spelling errors. The first type was a non-word homophone, such as *grean* for *green*. The second type was a non-word spelling foil that imitated the shape of the word, such as *greln* for *green*. The proofreaders failed more often to mark as incorrect non-word homophones than the non-word spelling foils. The authors concluded that, for proofreading at least, phonologic mediation is more important than orthographic representation to the identification of words. The validity of these results beyond proofreading is still uncertain.

DEREK (Direct Encoding Routine for Evoking Knowledge) is the subject of Chapter 5. In this chapter, Patrick Brown rejects recent reading process models as being too complex. His simpler model drops lexicons from the word identification process. Instead, he has only a semantic system and two buffers, one orthographic and the other phonological, that manage input and output but have no lexical knowledge. Brown blaims interference in the system for acquired dyslexia.

The level of scholarship displayed in this book impressed me. The authors attempt to re-interpret previous research findings to fit new breakthroughs. I wish I had the background and a better grasp of the jargon to better join the search to understand the basic processes of reading.

Bilingual education and language maintenance: A Southern Peruvian Quechua case. By Nancy H. Hornberger. Dordrecht, Holland: Foris Publications, 1988. Pp. xx, 277. $56.00. Paper $44.10.

Reviewed by Peter Backstrom

In *Bilingual Education and Language Maintenance*, Nancy Hornberger gives a detailed and thorough study of a bilingual education program in a Quechua-speaking community of southern Peru. As the title implies, she pays particular attention to the relationship between the bilingual education program and vernacular language maintenance. To do this, Hornberger describes the sociolinguistic setting of the study and contrasts the bilingual education program with traditional, Spanish-only schools.

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Hornberger gained her interest in and knowledge of the Quechua people and their language over the fifteen-year period that she spent among them. That knowledge and interest, along with her background in education and sociolinguistics, are clear throughout the book. She supports her statements with many actual speech samples, results of questionnaires, and notes from informal interviews.

The book consists of four parts of three chapters each. Part 1 details the study's theoretical grounding in cultural anthropology, sociolinguistics, and educational policy study. It also describes the historical, educational, and sociolinguistic background of the rural Quechua-speaking communities of Peru in general, and of the Puno region in particular. It describes various types of bilingual education programs and their differing philosophical orientations. In contrast with most bilingual education programs in Peru, the Puno program is of the language maintenance type, rather than transitional.

Part 2 describes the patterns of both Quechua and Spanish language use, as well as the values attached to these languages in two similar Quechua-speaking communities. One participated in the bilingual education program that began in 1980, while the other continued to use the traditional type of schooling. The language use and attitude patterns found within these communities are described in terms of three separate types of language-use domains: *ayllu* domains, in which Quechua is used exclusively; *non-ayllu* domains, in which Spanish is used exclusively; and *communidad* domains, in which variable language use occurs. An important point here is that school is traditionally thought of as stricly a *non-ayllu*, or Spanish, domain.

Part 3 describes the schools in the two communities. In particular, it contrasts the use of oral and written language by teachers and pupils in the two schools.

In Part 4, Hornberger discusses factors affecting the future maintenance or non-maintenance of the Quechua language in Quechua communities. Somewhat surprisingly, she believes that schooling is not a strong factor contributing to language maintenance. Nonetheless, the Puno bilingual education program greatly increased learning of subject content, increased student participation in class, and reduced behavioral problems. Despite these positive results, however, the community rejected bilingual education after three years because of the possibly mistaken perception by some influential community members that the program hindered their children's rapid

acquisition of Spanish, the language of economic and social advancement.

In the final chapter, the author seeks to answer two questions in light of all of the above: Can language maintenance be planned? and, Can schools be agents for language maintenance? Not unexpectedly, neither question can be answered with an unqualified yes or no. Language or education planning can only help when other sociolinguistic factors also point to language maintenance. In a stable diglossia situation with stable domains in which both languages continue to be used, an *enrichment* type of bilingual education program could contribute to language maintenance. This would be a two-way program reflecting "a valuing of Quechua by society not only for Quechua speakers but also for non-Quechua speakers." The community itself must choose such a program, rather than have it thrust upon them by outsiders.

Bilingual Education and Language Maintenance is a well-written and well-researched book that will be useful for all those interested in the very timely and controversial subject of bilingual education.

Perspectives on literacy. Edited by Eugene R. Kintgen, Barry M. Kroll and Mike Rose. Carbondale, IL: Southern Illinois University Press. 1988. Pp. xix, 475. $35.00 Paper $24.95.

Reviewed by Daniel Gillette

Perspectives on Literacy is an informative, balanced, and fascinating collection of 28 essays by a wide variety of authors. It provides a broad interdisciplinary overview of literacy in its many and interacting dimensions. The editors state the aim of the collection to be that of providing "the requisite background for informed and intelligent discussion of the many issues surrounding the question of literacy today" (p. xi). Those forming the philosophy and general organization of literacy programs will find it very useful.

After the introduction written by the editors, which provides a good summary of the overall organization, development, and conclusions of the book, the collection is divided into four sections:

Part I Theoretical Perspectives
Part II Historical Perspectives
Part III Educational Perspectives
Part IV Community Perspectives

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Part I is undoubtedly the most interesting and controversial section. The first essay, "The Consequences of Literacy" by Goody and Watt, claims that writing is the single most important dynamic separating simple ("primitive") and complex ("civilized") cultures. Goody and Watt, classic expositors of the received wisdom, are proponents of the Great Divide theory. This theory asserts that "Literacy affects the ways the members of a society think: literate thought is conceptual, nonliterate thought, concrete. As opposed to their nonliterate counterparts, literates engage in abstraction, generalization, systematic thinking, defining. . . These changes in cognitive capacity lead to history, logic, astronomy, taxonomic science in the modern sense, and even to democracy. . . Literacy itself confers certain general and wide-ranging cognitive skills that can be applied in different areas" (p. xii).

In addition to cognitive differences, the Great Divide theory posits profound social and economic consequences of literacy. Economically, literacy leads to development and modernization. Literacy "thresholds" are often cited as necessary conditions for economic advancement in developing nations. Socially, literacy leads to "universal unbridled progress" by increasing receptivity to social change through new ideas. Social consequences attributed to literacy include innovativeness, achievement-orientation, information- and media-awareness, linearity of thought and behavior, national identification, acceptance of technology, urban residence, and the possibility of large bureaucratic government.

Essay 2 is a thought-provoking analysis of orally based thought and expression. Essays 3, 4, and 6 argue against the Great Divide theory. The consequences of literacy in traditional China and India and among the Vai of West Africa are contrasted with classical Greece, since the latter is used by Great Divide theorists as evidence for their conclusions. At the least, these counter-arguments will help the critical reader come to his own conclusions regarding the nature and consequences of literacy.

What exactly is literacy? Essay 5, "Literacy in Three Metaphors," outlines the definitional problem in literacy, noting that how we define literacy has implications for social and educational policy. It is a very readable essay describing literacy alternatively as adaptation (a minimal, functional, pragmatic perspective), power (a social, political perspective) and as state-of-grace (a liberal arts education's self-enhancement perspective).

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Several essays comment on the close relationship between religion and literacy. Particularly interesting is the state-of-grace metaphor that states that "the literate individual's life derives its meaning and significance from intellectual, aesthetic, and spiritual participation in the accumulated creations and knowledge of humankind, made available through the written word" (p. 77). This perspective on literacy is often associated with religious traditions, especially Christianity and Islam, because they invest the written word (their Scriptures) with great power and respect. Several case studies detail the outstanding success of religiously motivated literacy programs, most of them in Reformation and post-Reformation Europe and North America, particularly in Sweden, Calvinist Scotland, and Puritan New England.

The essays of Part II, "Historical Perspectives," continue to explore for an adequate definition of literacy. They note that the definition of literacy has varied through different historical periods. These changing definitions range from the least demanding signature definition, in which the ability to sign one's name on documents was taken as proof of literacy, through intermediate recitation and comprehension definitions, to the most demanding analysis definition, in which literacy entails reading unfamiliar material with comprehension, analyzing it, and drawing inferences from it. Essay 12, "The Nature of Literacy: A Historical Exploration" by Daniel and Lauren Resnick traces three models of literacy education: Protestant-Religious, Elite-Technical, and Civic-National. More importantly, it highlights the implications one's literacy expectations have on policy.

Other essays in Part II deal with the relationship between literacy and schooling and with the literacy rates in various historical periods, particularly in Europe and America. Essay 9 explores different levels of trust preliterate and literate societies place in oral versus written language, and suggests the reasons for this. People in preliterate societies are often suspicious of written documents as against the trustworthiness of oral testimonies. This suspicion is not irrational. The discussion is helpful for those introducing literacy to preliterate cultures.

The Western (American) orientation of the book is even clearer in Parts III and IV. Those working in the developing world will find many of the essays minimally relevant to their context. An essay by Freire and another on the Nicaraguan National Literacy Crusade of 1980 are, however, notable exceptions. The latter essay describes the

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scope, organization, pedagogical method, and results of this phenomenal campaign. As the author states, "The extent and rate of the mass mobilization were unprecedented. To reduce the illiteracy rate from 50% to 15% within a period of nine months meant that nearly every person who knew how to read and write had to teach those who did not" (p. 410).

The book's theoretical slant makes practical, methodological, and pedagogical considerations almost wholly absent from this book. Nevertheless, it is invaluable background reading for someone seeking a philosophy and definition of literacy. It makes for some very interesting reading while providing a principled basis for those forming literacy policy or engaging in program planning.

Beyond language: Social and cultural factors in schooling language minority students. By Bilingual Education Office, California State Department of Education. Los Angeles, CA. 1986. Pp. 343. Paper $19.00. (*Available from the Evaluation Dissemination and Assessment Center, California State University at Los Angeles, 5151 University Drive, Los Angeles, CA 90032*)

Reviewed by Steve Parkhurst

With the Los Angeles riots still fresh in our minds, more than ever we see the need for quality books like *Beyond Language*. This book tackles the complex and controversial issue of educating those from language minorities in the United States. Though the authors wrote the book for educators in California, it can be applied to multicultural, multilingual situations world-wide.

Beyond Language examines the complex relationship between cultural and social factors and the success and failure of minority students. Previous studies examined minority education failures and concluded that the student's language or culture caused the breakdown. This book goes beyond the language and culture of the students to examine the broader scene.

The book consists of seven chapters written by an impressive array of educators, anthropologists, psychologists, and sociologists. In the first chapter, Carlos Cortés presents a model for the education of language minority students based on contextual interaction. The model is extremely complex, yet Cortés reveals a clearer picture of the problems facing minority education. No one factor is blamed for the

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situation, nor are solutions easy quick fixes. Cortés stresses the examination of both the societal context and the school context. Family, attitudes, socioeconomic status, community, culture, ethnicity, and other factors help to form the student even before entering the school situation. These factors are coupled with the teachers' attitudes and training, the curriculum, parent involvement, the student's self image, language proficiency, and life goals. In short, failure is viewed in the context of the students, teachers, educational system, community, and other factors.

Each chapter examines a piece of this complicated puzzle. Seldom does a book written by eleven authors work so well to create a cohesive, interactive volume. The authors do not agree on every point, yet each has a strong commitment to contextualizing the problem.

In Chapter 2, Stanley Sue and Amado Padilla take one part of the contextualized model and challenge the philosophy of educators and society toward cultural and language differences in minority students. They attack several commonly held views of minorities including the *cultural mismatch* view that some cultures match the values of the western education system better than others. For example, Asian students who on average do better than Anglo students, come from a culture closer to western education than do Hispanic students, who score below the Anglo students. While this is true in some cases, it does not fully explain the differences. Sue and Padilla say that such attitudes inappropriately assert the superiority of one culture over another.

In Chapter 3, anthropologists John Ogbu and María Eugenia Matute-Bianchi study the cultural mismatch hypothesis from the angle of the students' attitudes. Examples from the U.S. and elsewhere show that the simple cultural mismatch hypothesis is invalid. They show societal *folk theories of getting ahead* that affect the motivation of the students to succeed in the education system.

In Chapter 4, Shirley Brice Heath looks at the role of language use and education. She examines how different minorities use language in their homes. The choice of which language to use is less important than how it is used.

Authors Stephen Díaz, Luis C. Moll, and Hugh Mehan go beyond the use of language into the sociocultural organization of the schooling system in Chapter 5. They advocate the use of ethnographic methods to study the sociocultural environment of students. Such

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studies in the students' homes and community can lead to appropriate adaptations in the classroom and community.

Chapter 6, by Spencer Kagan, is the most pedagogical chapter. He examines several methods of cooperative learning in the classroom. Kagan emphasizes the outcomes of the student, including attitudes on ethnic relations, cultural values and social cooperation.

Mary McGroarty pulls everything together in the final chapter. She relates each study to the overriding concept of a contextual approach to the education of minority students. She gives detailed suggestions for parents, teachers, school administrators and educational trainers to apply the concepts presented in this volume.

Those looking for a step-by-step solution to the problem of minority education or detailed lesson plans for the *correct* program will only be frustrated by this book. The authors ask more questions than they answer, and the answers they give build an extremely complex view of the solution. The suggestions they give require a degree of sophistication and training currently not required of teachers, yet their case is well documented in this book.

The concepts in this book have international applications. Few societies are culturally homogenous. Where cultural diversity occurs, there is often tension between the dominant and minority groups. Since this book focuses on working with minority groups, the ideas can be applied to any situation. In a world of cultural unrest, this book is an outstanding contribution, and is well worth its careful consideration.

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NOTES

SIL PHILIPPINES PUBLICATIONS FORMAT GUIDELINES

These format guidelines are reprinted from the Philippines Branch Technical Memo #170, June 1992.

The careful formatting of a book does much to make the material attractive and easier to read. When preparing books for unskilled or semi-skilled readers, we should pay special attention that pages are not crowded and heavy. This can be avoided by controlling line length and leading. These considerations take precedence over our "save paper" philosophy.

Thus this paper was prepared in an attempt to provide a few guidelines for formatting reading materials for beginning and semi-skilled readers. We hope you find it a useful tool.

1. BOOK SIZES

The most commonly requested book sizes are:

-½ legal size-approximately 6½"x 8½"

-½ letter size-approximately 5½"x 8½"

-Manual size-approximately 8½" x 11"

These three sizes are easily handled on silk-screen and mimeo as well as by the print shops. Manual size is primarily recommended for primers, workbooks, teacher's guides, math books, etc.

Other sizes are available, but it would be wise to discuss their use with your literacy consultant and the publication manager before requesting them. Odd sizes may create costly paper trimming and add time expenditures.

Books printed with the long dimension horizontally (rather than vertically) are costly for the same reason of paper loss in cutting. The horizontal format is recommended primarily for such things as three or four column vocabularies.

2. GENERAL FORMAT GUIDELINES

We recommend adequate "white space" in all SIL publications, that is uncrowded margins on all four sides of the text, controlled line length and sufficient leading (vertical line spacing) to support easy reading and attractive pages. Books that look difficult and cluttered

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ultimately do waste paper in that they often remain unused. They also give the impression of low quality.

A. Margins

1. Minimum margins in all literacy materials should be 1″ on top, bottom, and outside edges, and 1½″ on the inside (bound) edge. (On a thin book of 5-20 sheets of paper, a smaller inside margin, but not less than 1″, can be used.

2. Justification of the right-hand margin is not recommended for unskilled or semi-skilled readers.

B. Line Length

We recommend that the line length in literacy materials be controlled, according to the skill level of the intended reading audience. For unskilled or semi-skilled readers:

1. Use ½ legal size format (6½ x 8½), with a maximum line length of 4″ (this is approximately 43 pica type characters per line but the number of characters will vary with the proportional type used with the Ventura publishing system).

2. Use ½ letter size format (5½ x 8½), with a maximum line length of 3″. (This is approximately 38 pica type characters per line but the number of characters will vary with the proportional type used with the Ventura publishing system.)

C. Columns

To make reading easier, it is highly recommended to use a 2 column format on a manual size (8½ x 11) page. It should also be considered on a ½ legal size (6½ x 8½) page when there is full text and maximum line length.

D. Leading (vertical line space)

When using a typewriter for literacy materials, we recommend a double space between lines and a triple space between paragraphs. For Scripture we recommend a minimum leading of 1½ spaces between lines and a double space between paragraphs.

When typesetting literacy materials, a leading of 12/22 or 12/24 is recommended with 12/26 or 12/28 between paragraphs. For Scripture we recommend 12/18 within the paragraph and 12/22 or 12/24 between paragraphs (10/15 and 10/20 for more skilled readers).

E. Type Size

For most reading material, regular pica type (12 point type) is probably adequate, even for new readers. Larger print (14 point usually) may be used in some early reading materials and in primers. Testing indicates that adequate leading and controlled line length contribute more to easy readability than large type size.

For pre-primers, primers, hymn and song books, a sans serif type (e.g., Swiss) is easiest to read for beginning readers.

Be sure to look at the actual type. You may need to choose between two styles of the letter "g" and the letter "a." In some type styles, the letter "l" and the capital "I" (i) are indistinguishable.

F. Titles and Headings

DO NOT USE all caps for titles and heading. Use **bold** or underlining to make them stand out. On a typewriter, triple space before a section heading and double space after it. In typeset material, a leading of 12/26 or 12/28 should be used before the section heading and a leading of 12/22 or 12/24 should be used after it.

G. Illustrations

Pictures can make reading materials more attractive and reduce the heaviness of the printed text. For beginning readers we recommend that easy reading books have a picture, maybe a half page in size, on each two page spread. Scripture and other reading materials also need an adequate number of pictures to break up the text. Funding agencies, however, may limit the number of pictures which can be included, in which case you would need to pay for pictures over their limit.

Remember to plan ahead so you will have time to do the required testing of pictures with the readers (all pictures need to be understood and culturally appropriate). Don't wait until you are at the Center and turning in the manuscript to think about pictures.

H. Page Numbers

Page number one always starts on the right, therefore all odd numbers are on the right and all even numbers are on the left. Placement of numbers must be consistent. For new readers bottom page placement is recommended. For song or hymn books, numbering of the songs is enough; don't number the pages too (or you could number pages and not songs).

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I. Paper

Paper costs are escalating. Newsprint is manufactured in this country and costs about half of what book paper costs, as the latter is usually imported.

When mimeographing or silk-screening, newsprint works well. Colored bond paper in legal and letter lengths may be purchased in various pastel colors from the print shops, and makes inexpensive covers.

Two copies of all literacy materials done by the Publications Dept. are automatically run on white paper and stored for potential reprint purposes.

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NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236
U.S.A.

Note for contributors: Readers are invited to submit letters of comment and publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 West Camp Wisdom Road, Dallas, Texas 75236.

Computer media: Contributors are encouraged to submit copies of their manuscripts on computer media (MS-DOS or MAC format) along with a paper copy of the manuscript.

ISSN 0737-6707

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RECEIVED JUL 2 9 1993

ASHENINCA HISTORY AND FORMAL SCHOOLING: A STORY OF CHANGE IN PERUVIAN AMAZONIA

Ronald J. Anderson

Ron Anderson and his wife Janice worked with the Asheninca Campa program in Peru for 13 years. This paper is adapted from Ron's dissertation, Stories of Change: The Asheninca Campa of Peru, which is abstracted in NOL 18.2. Ron edits Notes On Literacy.

1. INTRODUCTION

The history of Asheninca contact with others can be divided into seven periods: Precolonial, Catholic Missions, Rebellion and Isolation, Economic Exploitation, Seventh-Day Adventist Missions, and Contemporary. Each period is characterized by its institutions, power structure, settlement patterns, and technology, all bearing some degree of influence today. Though the Asheninca were widely dispersed throughout most of these periods and many events directly affected only a few Ashenincas, cumulative and irreversible changes occurred that spread throughout Asheninca territory. The present situation is a mix of valued traditional skills and new technologies. Individual goals spring from the changes, social relationships are constrained by them, and spiritual beliefs challenged by them.

2. PRECOLONIAL ASHENINCA SELF-SUFFICIENCY

Little is known of precolonial Asheninca history, but evidence exists of trade with other groups. Though jungle-dwelling Ashenincas were self-sufficient in most of their material needs, they traded with highland Quechuas before the early missionaries arrived (Craig 1972). Spanish explorers of the 17th century saw Ashenincas and other Indians come steadily to the salt deposits on the boundary between the Andean and Asheninca areas, a likely place for trade (Ortiz 1978). The Asheninca probably traded jungle products such as animal skins, bird feathers, medicinal plants, and coca leaves for stone axes. Ashenincas could manufacture their own stone tools, but the harder stone from the highlands was an improvement over local materials.

3. CATHOLIC MISSIONS INTRODUCE METAL TOOLS

The Asheninca of the upper Perené valley were already in contact with non-Indian traders when the Franciscan missionaries arrived, and

by 1742, 27 missions to the Asheninca were functioning (Steward & Metraux 1963, Varese 1968). The Asheninca generally welcomed the missionaries, who gave gifts of metal tools in exchange for goods and services (Craig 1972). The Asheninca saw the missionaries as a better source of tools for which they were already trading with others.

Metal tools revolutionized Asheninca agricultural practice. Asheninca fields are now much larger than when only stone and wooden tools were available. Today's larger fields make it possible to brew more manioc beer, to manufacture dried farina used for food on long trips, and to sell excess produce to *mestizos* (non-European Spanish-speakers). A change in technology led to a change in power structures. Possession of tools and other trade goods gave individuals new social advantage. Craig tells how metal tools created a need that went beyond the goal of easing the work load.

> The accumulation of these items together with cloth goods and shotguns has since become a status symbol requiring much travel, social interaction, and complex barter—factors which tend to lessen the traditional tendency toward misanthropic isolationism. (Craig 1972:20)

The Franciscans intended to transform Asheninca culture in ways that went beyond the introduction of metal tools. They wanted eventually to integrate the Asheninca into a wider society and welcome them into the Catholic faith. The missions taught new crafts, agricultural technologies, and religious doctrine (Ortiz 1978). Children and adults studied separately, children learning the catechism and adults learning doctrine and manual skills such as metalworking and carpentry. The priests introduced many new plants from Spain and the coastal area of Peru, plus cattle, sheep, pigs, and chickens (Elick 1970). When an adult showed more competence than others at a craft, he often was made an instructor.

4. REBELLION AND ISOLATION

Though the Franciscan missions had optimistic beginnings, all were destroyed less than a hundred years after their founding. Bands of Ashenincas periodically attacked the missions beginning in 1674 because some did not want to abandon old customs, some feared quickly spreading illness, and others were irritated by the limits put on their freedom by the mission (Biedma and Tibesar 1981).

In 1742, the uprising of Juan Santos Atahuallpa Apu Inca destroyed all the missions in the Asheninca area. Juan Santos was not

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an Asheninca, but was part Spanish and part Quechua from the Andean region. He claimed to be a direct descendant of the Inca kings and planned to drive the Spanish from Peru. He and his band of followers went to the jungle to recruit Asheninca and other jungle Indians for their army. They killed or drove out the Franciscans, and contact with Spanish-speakers ceased for over 100 years.

The Franciscan missions had the potential to affect the Asheninca irreversibly. Prolonged contact could have meant the physical extinction of the tribe through disease or by setting up a feudal system, as happened in the Andean region. Asheninca life would then have revolved around missions and feudal lords, the sources of metal tools and other manufactured goods. As it turned out, the technological innovations of metal tools, domesticated animals, imported trees, and some folktales are all that remain of the Catholic Missions Period. All other attempted culture changes returned to conditions similar to those of the Precolonial Period.

Within a generation, the Asheninca forgot most of the skills taught by the Franciscans. They continued to forge machetes and axes for a short time in one location and raised some domesticated animals, but on a smaller scale than before (Benavides 1986). No evidence exists of Asheninca reading, writing, or Christian worship during the Isolation Period. The culture changed little, with one major exception: they continued to use metal tools, which were widely traded throughout the Asheninca area. Biedma wrote in 1782 that metal tools were a focal point of attention for the jungle Indians and that women were very busy making clothing and sheets from cotton so their men could trade them for metal tools (Biedma and Tibesar 1981).

Chronicled contact with the Asheninca did not resume until 1847 with the construction of a fort at San Ramón in the Chanchamayo Valley. The Asheninca met the reopening of contact with occasional violence to outside settlers. More distant areas of the Asheninca remained isolated as late as 1870, and the Gran Pajonal area remained virtually unknown until more than 50 years later.

5. INCREASED CONTACT LEADS TO EXPLOITATION

The market economy began to enter the Asheninca area in the late 1800s. After the founding of the fort in San Ramón, colonists quickly took the best land from the Asheninca and other Indians in the Chanchamayo Valley. In 1891, the Peruvian government granted 500,000 hectares of the Perené Valley to the British-run Peruvian

Corporation to help pay Peru's foreign debt to England, France, and the Netherlands (Barklay 1985). The Peruvian Corporation gave the Asheninca who lived in the valley the choice of either moving off the land or staying to work the coffee plantations under difficult living conditions. Supervisor harshness, malaria, and the impossibility of getting out of debt made many want to flee their prison-like conditions. Other workers came to the valley from the Andean region and the Asheninca soon became a minority.

At the same time, the Rubber Boom spread up the Ucayali, Pachitea, and Pichis Rivers, beginning a period of frequent contact with Spanish-speakers in those valleys. The Asheninca population expanded from the east bank of the upper Ucayali River to the border with Brazil because of the rubber industry. The *patrón* system between the Indians and entrepreneurs began in this period (Varese 1968). In this system, a businessman claimed a group of Indians and became their only source of manufactured goods. The Asheninca received weapons, clothing, salt, and tools from their *patrones* in exchange for work, but with little hope of getting out of debt. Contact pressure steadily increased during this period, with frequent displacement, slave-raids, and much debt-peonage (Bodley 1972).

By 1913, the economic consciousness of many Asheninca was heightened. They often worked beside colonists from the Andean region who explained to the Asheninca how the *patrones* and Peruvian Corporation cheated them. The Asheninca could respond in one of three ways: cut the economic relationships and lose the technological advances they had become accustomed to, kill the *patrones* and their supporters to make an example of them, or learn to play the market economy game through modern education. No Asheninca chose the first option, but some chose the second option, resulting in the 1913 revolt in the Pichis Valley, the last major Asheninca uprising (Ortiz 1978). The third option, education, was about to be provided by Protestant missionaries.

6. SEVENTH-DAY ADVENTIST MISSIONS: VILLAGES, EDUCATION, AND AN ADAPTIVE IDEOLOGY

Protestant missionaries brought modern education to the Asheninca after the 1920 constitution liberalized laws governing missionaries in Peru. It declared that Peru was Roman Catholic and the State would protect Catholicism. This was the first constitution that did not mention the exclusivity of Catholicism as the religion of the Peruvian

State. In response to this slight liberalization, Protestant missionaries to the Indians began to arrive in the 1920s. Like the early Catholic missionaries, they found their ministries more effective when they used the native languages, so many Protestant missionaries learned the languages. Their knowledge was often imperfect and they depended heavily on native evangelists to proclaim the gospel message in the Indian languages. Though barely literate, these native evangelists were very effective.

The Seventh-Day Adventist missionary Frederick Stahl and his coworkers not only taught Christianity, but also became allies with the Asheninca in their disputes with the Peruvian Corporation. Relations between the missionaries and the Peruvian Corporation worsened to the point that the missionaries and their followers were forced to move off Peruvian Corporation land. The mission divided and established two villages that later founded other villages.

A few years later, Stahl and some of his followers went to the Ucayali region, again siding with the Indians against the exploitation by the *patrones* (Bodley 1970). The missionaries and their converts ran away from the *patrones* and their debts, hiding along streams off the main river and founding new villages. In both the Ucayali and Perené regions, and later in the Pichis region, the missionaries tried to make the Asheninca independent of the Peruvian Corporation and the *patrones*, while still trying to preserve for them some participation in the market economy. The mission eventually received moderate-sized grants of land from the Peruvian government and organized the villagers to produce agricultural products for sale, giving some Ashenincas an alternate source of income and freeing them from perpetual indebtedness.

Formal schooling began as a response to economic exploitation. Ashenincas often worked for the Peruvian Corporation beside mestizos who knew how to calculate their accounts. Some of these mestizos helped Asheninca men to learn Spanish and understand money. The Asheninca found these skills useful, so they wanted their children to learn them. Missionaries started schools at the request of the Asheninca, hoping to empower the Asheninca against economic exploitation. The schools taught arithmetic, reading, writing, and religious doctrine. Group work projects to earn money for the school and to raise vegetables were also part of the curriculum. Few adults went to school, though most adults attended twice-daily devotional services.

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The Seventh-Day Adventist missionaries did not plan to translate the Bible into the Asheninca language; they relied on bilingual interpreters to teach the fundamentals of the faith, so native-language reading and writing were not taught in the school. All reading and writing lessons were in Spanish.

The first schools were not an overnight success. The Asheninca were told from many sources that an education for their children would help them in the economic aspects of their lives, but for many, the cost of living in a village was too high. The Asheninca traditionally lived as isolated nuclear families or in small groups of the families of adult brothers and sisters, but the missions and the schools encouraged all people—family and stranger—to live in villages, which disrupted traditional settlement patterns.

A fear of sorcery was a barrier to forming a village or sending children to school. The Asheninca believe that young-to-adolescent children can be witches who cause great harm by burying refuse taken from a victim, so parents teach children to avoid children who are not close family. A child contaminated by another is believed to become a witch—a risk that many parents were not willing to take.

Another barrier to forming a village was the fear of sickness. Ashenincas attribute measles, whooping cough, polio, and flu to contagion, not sorcery. Living in a village became taboo for many who said: "If you live in a village, you will get sick." The common sense of this was reinforced every time someone in the village became ill. Some Ashenincas still abandon villages, almost overnight, when sickness appears. Though being in a village was considered dangerous to one's well-being, many saw the benefits of membership in the religious community and the economic empowerment of schooling as worth the risk.

Schooling for the Asheninca was an economic burden for the families of the students. The Seventh-Day Adventist mission was poor and could barely finance the living costs of the American missionaries. Peruvian lay-preachers, the churches, and the schools were financed by those served; parents and students were expected to build and maintain a schoolhouse, buy study materials, and pay a modest salary to the teacher. The school was typically supported by a communal field worked by parents and students on special work days, with the profit from the sale of cattle or crops going directly to the school.

Initially, teachers were Seventh-Day Adventists from the Andean region who learned Asheninca, but by the early 1950s, some Asheninca

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young men taught in the schools. In these schools, the Asheninca language was spoken only when necessary for accurate communication; everyone was expected to learn to speak, read, and write in Spanish.

In the Pichis Valley, family leaders came to the Seventh-Day Adventist mission station of Nevati to ask for schools for their children. The American missionary in Nevati chose fifteen young Asheninca men whom he sent to these villages to teach school and preach the gospel. Some villages became disenchanted with the program because of the school's economic requirements and the strict Seventh-Day Adventist code of behavior. These villages still wanted schools, so they requested them from the Peruvian government, which established the first Pichis Valley government-supported school for Ashenincas in 1959. By this time, district officials looked favorably on Asheninca requests for schools because the expansion of private Seventh-Day Adventist schools produced tension with the Catholic colonists in the nearby town of Puerto Bermúdez.

By 1963, another four government schools for Ashenincas were established and the number of schools steadily increased to the present 90 schools in the Pichis, Perené, and Ucayali regions. The Asheninca were still responsible to pay for study supplies and to build and maintain a thatch-roofed schoolhouse, but the government paid the salary of the mestizo teachers, and the pressure to adopt the Seventh-Day Adventist code of behavior lessened. Other mission groups founded schools in the Asheninca area, but their significance is small in comparison with that of the Seventh-Day Adventists.

Though the events of the Exploitation and Seventh-Day Adventist Periods were significant, they directly affected few Ashenincas. Only in the contemporary period did these events and others bring changes that affected almost everyone.

7. THE CONTEMPORARY PERIOD

Ashenincas who wanted to participate in the market economy sent their children to school to remove some of their disadvantage when dealing with mestizos. As the number of schools increased, other changes increased the need for skills taught in the schools.

Fernando Belaunde Terry, President of Peru 1964-1968 and 1980-1985, spoke of the Perené and Pichis Valleys as the future economic salvation of Peru, and he started road-building projects in the two valleys. The mere proposal of these roads started a land rush by

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mestizo colonists, most taking land traditionally cultivated by the Asheninca. Many Ashenincas disliked the mestizo colonists and moved away. During this time of social upset, Ashenincas who once worked as teachers or lay-preachers for the Seventh-Day Adventist mission became political leaders. The first attempt to organize the Asheninca politically was in 1959 in the Perené region, where the assembled delegates agreed to ask for native land reserves with boundaries respected by the colonists (Casanto 1986). Throughout the 1960s, villages sent delegations to Lima to protest colonist infringement of Asheninca lands.

Independent of these troubles, a military coup deposed Belaunde in 1968 and installed General Juan Velasco Alvarado as president of Peru. The new government carried out a comprehensive agrarian reform program and a series of decreed laws giving Indians many new land and political rights. Soon, groups of young anthropologists and sociologists from the government went to the Perené and Pichis regions to raise Asheninca consciousness about their new civil and land rights. These anthropologists preferred to work with the more bicultural, bilingual, educated Ashenincas trained in the mission schools. These government-sponsored activists from Lima formed an alliance with the Asheninca against both the colonists and regional politicians. They organized village councils composed of a chairman, vice-chairman, treasurer, secretary, works supervisor, lands organizer, lieutenant governor, and other minor positions. Villages called periodic community meetings and sent delegates to regional meetings for villages to discuss mutual problems and to petition local and federal government agencies for changes (Casanto 1986). Recognizing the colonist threat to their well-being, the Asheninca enthusiastically accepted these political innovations. Few villages, however, were completely successful because many lacked anyone who spoke Spanish or could read. Many villages could fill only one or two of the village government positions with literates. Today, any man who is in good standing and is literate can be elected to a village position.

A new constitution gave the native Indian minorities a legitimacy never seen before in Peru. Speaking of native populations, Chapter Four of the Constitution of 1979 is titled "Education, Science, and Culture." Regarding language issues, Article 23 states, "The State guarantees parents the right to take part in the education process of their children. The parents have the right to decide the kind and place of education." Article 34 says, "The State will preserve and stimulate the manifestation of the native cultures." Article 35 says,

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"The State promotes the study and knowledge of the native languages. It guarantees the right of the Quechua, Aymara, and jungle Indians to receive primary education in their language" (my translations).

The Peruvian government gave native people jobs as bilingual school teachers and bilingual paramedics before 1979 in other areas of Peru, but the legislation that permitted such appointments was not strong enough to be enforced in the Asheninca area until after the passage of the Constitution of 1979. Gradually since 1980, Ashenincas with a high school education and training in pedagogy have begun to replace mestizo teachers in village schools. Also, Asheninca paramedics have been trained, hired, and assigned to many village clinics and even to district medical centers, where they treat Ashenincas and mestizos.

These changes in employment opportunities have altered the attitude of many to education. Since 1979, Ashenincas have begun to want education for their children, not only to participate in the market economy or to protect village interests threatened by the colonists, but also to qualify for government jobs reserved earlier only for mestizos. The Asheninca's desire for education changed from that of a first generation wanting the ability to figure accounts with *patrones*, to the next generation wanting to protect their interests through participation in democracy, to the current generation aspiring to professions that require post-primary education.

8. CONCLUSION

Throughout Asheninca history, outsiders and innovations have left their mark on the Asheninca. The Franciscan missionaries introduced metal tools and a few domesticated animals. The need for metal tools attracted many Ashenincas to the market economy, and once they became a part of the market economy, the Asheninca saw that the skills of writing, arithmetic, and Spanish were useful for interacting with their employers. Protestant missionaries soon arrived to establish schools. Schooling proved useful to the Asheninca, so literate adults routinely sent their children to school.

The purpose of schooling quickly changed. Originally, schooling was seen as necessary to learn to calculate individual accounts. Later, schools prepared bilingual leaders to represent the villages to government officials. Since the granting of Indian rights by the Peruvian Constitution of 1979, schooling prepares Ashenincas for professional jobs like paramedic and school teacher. This gave value

to an even higher level of education and added a new dimension to the power structure by giving higher prestige to those with more education.

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FREQUENCY COUNTS: IS THERE ONE BEST METHOD?

By David Holbrook

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1. METHODS OF FREQUENCY COUNTS

How does a literacy worker determine which phonemes to introduce first in a primer? One way is to do a count of the phonemes to determine which occur most often. The purpose of this paper is to describe methods of doing frequency counts, to apply them to a short text, and to compare the degree of variance between the different methods.

Different authors promote different ways of doing counts. This necessitates the definition of terms used in this paper.

Simple frequency: A count in which all the occurrences of a phoneme are counted is called an *absolute frequency* by Gudschinsky (1973) and a *simple frequency* by Steve Walter (personal communication). The term simple frequency is used in the rest of this paper.

Appearance-in-word frequency: A count in which a phoneme is counted once for every word it appears in, regardless of how many times it appears in the word.

Simple word count: A count in which every occurrence of a word in a text is included in the frequency count.

Appearance-in-text word count: A count in which a word is counted only once, regardless of the number of times it occurs in the text.

These four ways of counting can be combined to produce different methods of doing frequency counts.

Gudschinsky (1973) promotes a combination of appearance-in-word frequency and appearance-in-text word count. The condition she places on a frequency count is to use only content words and exclude functors (grammatical words, clitics, and affixes).

Gudschinsky teaches functors as sight items. "A sight item is a word or word part the pupil is required to learn at sight before its parts have been taught, rather than figuring it out from the letters or syllables" (Gudschinsky 1973:85). She does counts based on

continuous text, and neither promotes nor condemns using lists of content words, as found in a dictionary.

Ernest Lee's (1982) method is similar, but it has some differences. Like Gudschinsky, he combines appearance-in-word frequency and appearance-in-text word counts of content words in continuous text, excluding functors. He differs, however, by doing counts on lists of content words found in a dictionary or doing counts on a list of content words that may be suitable for topics in primers.

Gudschinsky counts phonemes in a word only once, no matter how many times it occurs in the word and regardless of its position within the syllable. Lee counts phonemes in each possible syllable position. If a phoneme occurs twice in a word, and both times in the same syllable position, it is counted only once. If, however, a phoneme occurs twice in a word in two different syllable positions, it is counted twice—once in each position. This method not only shows which phonemes occur the most, but also shows the syllable position in which they are the most productive.

David Weber combines appearance-in-word frequency and simple word count (McConnel, personal communication). Whereas Gudschinsky and Lee exclude functors from frequency counts, Weber cites two reasons to include them: (1) They occur frequently in connected text, and (2) natural language can only be achieved with the use of functors (Weber 1992). The exclusive use of connected text is another Weber characteristic.

Weber (1992) uses computer programs to make the primer writer's task easier. Weber et al (to appear) use two methods to determine the order of introduction of phonemes based on the frequency count. The first method uses a computer to check a large text to determine which phonemes produce the most words. A small set of phonemes that produces the most words is introduced first, the phoneme that produces the most new words when combined with the original set is introduced next, and so on. Weber calls this the *productivity algorithm*.

The second method, the *elimination algorithm*, also uses a computer to check an entire large text. The program finds the least occurring phoneme and eliminates all words with that phoneme as possibilities for the initial primer lessons. Then words with the next least occurring phoneme are eliminated, and so on. After this process is repeated numerous times, the small set of phonemes left are introduced first. The next phoneme taught is the last phoneme eliminated, and so on. Regardless of which method the primer writer

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uses, he or she is not strictly bound by the order of introduction suggested by the computer; other factors may favor a different order.

Baucom (1978) combines simple frequency and simple word counts of both functors and content words. To get a general idea of the most frequent phonemes, Baucom does a frequency count based on only the functors. Because functors occur so regularly, this count provides a general idea of which phonemes occur most. Baucom differs from the others in that he promotes doing counts based on spoken language. He justifies this by saying that written language may contain words that do not appear in spoken language.

None of the authors propose doing a count based on combining a simple frequency with an appearance-in-text word count. Two of the authors include functors in their counts and two do not. The tension seems to be focused on the timing of teaching functors. Weber assumes that "functors should not be taught until their letters have been taught" (1992:26). On the other hand, Gudschinsky has no problem teaching a functor as a sight item before its letters have been taught. Like Gudschinsky, I think content words are more important than functors, but like Weber, I feel uncomfortable teaching functors before teaching their letters. I especially do not like Gudschinsky's method if a language has multisyllabic functors which are similar in word shape (e.g., Akawaio: *morobai* 'and', *moratai* 'then' and *uurönogong* 'our', *amörönogong* 'your' (pl.)).

My method is an attempt to balance the tension between including or excluding functors. It takes into account that functors occur more frequently than content words. I use an appearance-in-word frequency applied to both functors and content words, but the count for functors is a simple word count and the count for content words is an appearance-in-text word count. The results of the two counts are assigned a ranking number. The most frequent phoneme in each list is assigned the number one, the second two, and so on. The scores for each phoneme are added together. The lowest scoring phoneme is given the highest ranking.[1]

Figure 1 is a diagram of the six methods. Other methods could be proposed and other parameters introduced (Lee's syllable position criteria, for example), but that is not my purpose and is not done here.

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[1]My thanks to Steve Walter for the idea on how to rank the results by assigning numbers and adding them together.

Figure 1. Methods of frequency counts

	simple frequency	appearance-in-word frequency	
simple word count	Baucom	Weber Holbrook (functors)	include functors
			exclude functors
appearance in text word count			include functors
	No Author (N/A) promoted	Gudschinsky, Lee Holbrook (content)	exclude functors

2. THE METHODS APPLIED TO A SHORT TEXT

I applied the six methods to a control text to show the differences and similarities produced. The text is from the Akawaio language of Guyana, South America (Edwards 1977).

The N/A method combines a simple frequency and an appearance-in-text word count. No author promoted this method, but it has been included because it is a possible option. Functors are excluded because the authors who chose an appearance-in-text word count also chose to exclude functors, whereas those who chose a simple word count chose to include functors.

The most frequently occurring phoneme in both Charts 1 and 2, and in all the counts, is *a*. This appears to be the only absolute in this data. Methods that use an appearance-in-text word count are not as effective on smaller portions of text as they are on larger ones. Chart 1 shows that the Gudschinsky, Lee, and N/A methods have several large groups of phonemes which have equal numbers of occurrences. This could hinder deciding the order of phoneme introduction and it hinders comparing methods at this level. Chart 2 also has some groupings, but these are smaller groups and are not as big a hindrance. They may, however, be evidence that an even larger body of text material is needed. Statistical accuracy of this type is not essential when we look only for the phonemes occurring most often. A high degree of specificity in frequency counts may be an unwarranted use of time and energy. Lee (1982) warns that the value of frequency counts is often overrated.

Chart 1. Results of the first paragraph[2]

Gudschinsky		Lee		Weber		Baucom		N/A		Holbrook[3]							
										functor			content			rank	
a	23	a	29	a	57	a	78	a	34	1	a	23	1	a	23	a	2
i	12	i	13	k	36	k	39	ï	15	2	k	19	2	i	12	k	5
k	11	k	11	r	32	o	35	i	13	3	o	18	3	k	11	o	9
m	11	m	11	o	29	ö	35	m	12	4	ö	16	3	m	11	r	10
r	9	r	9	ö	28	r	34	k	11	5	r	15	5	r	9	m	12
ng	8	ng	8	p	24	ï	29	ng	10	6	t	14	6	ng	8	p	13
n	8	n	8	m	24	m	26	o	10	7	p	12	6	n	8	ï	14
o	8	o	8	i	22	p	24	r	9	8	ï	11	6	o	8	i	14
ï	8	ï	8	ï	21	i	23	ee	8	9	m	10	6	ï	8	b	16
ee	8	ee	8	t	21	t	21	b	8	10	b	9	6	ee	8	n	16
b	8	b	8	b	19	b	19	p	8	10	n	9	6	b	8	ö	17
p	8	p	8	n	18	n	19	n	8	12	i	7	6	p	8	ng	18
e	7	e	7	ng	17	ng	19	w	8	12	ng	7	13	e	7	ee	21
ö	7	ö	7	ee	15	ü	17	ü	7	14	y	5	13	ö	7	t	23
ü	7	ü	7	ü	14	ee	15	e	7	15	ü	4	13	ü	7	ü	28
w	7	w	7	e	11	w	14	ö	7	15	ee	4	13	w	7	e	31
t	6	t	6	y	11	e	11	uu	6	17	g	3	17	t	6	w	31
uu	4	uu	6	w	11	uu	11	t	6	18	e	2	18	uu	4	y	32
g	4	g	4	g	9	y	11	g	4	18	oo	2	18	g	4	g	35
y	4	y	4	uu	8	g	9	y	4	18	d	2	18	y	4	d	39
d	2	d	2	z	6	z	6	d	3	18	s	2	21	d	2	s	39
s	2	s	2	j	6	j	6	oo	2	18	z	2	21	s	2	z	39
z	2	z	2	d	5	d	6	s	2	18	w	2	21	z	2	uu	42
ch	2	ch	2	s	4	s	4	z	2	24	uu	1	21	ch	2	oo	44
j	2	j	2	oo	3	oo	4	j	2	24	u	1	21	j	2	j	47
oo	1	oo	1	ch	2	ch	2	ch	2	26	j	0	26	oo	1	ch	47
u	0	u	0	u	1	u	1	u	0	26	ch	0	27	u	0	u	51

The order of occurrence of phonemes in Chart 1 is different from that in Chart 2. If, however, one is looking just for sets of phonemes that occur most often, this difference in order is not significant. For example, the top seven phonemes in Lee's method, if not taken in order, are the same in Charts 1 and 2 (though in Chart 1 three of them occur in a larger cluster). The top seven phonemes in Weber's method and the top eight in the N/A method are also the same in both charts.

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[2]All numbers to the right of the letters are the actual number of occurrences of these letters except the rank column.

[3]The numbers to the left of the letters in the functor and content columns are the rank numbers. They have been added together for their respective letters to obtain the rank numbers in the rank column. For example, *k* is ranked 2 in the functor column and 3 in the content column. These two numbers are added together to obtain the rank number 5 for *k*.

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Chart 2. Results of the whole text

Gudsch-insky		Lee		Weber		Baucom		N/A		Holbrook							
										functor			content			rank	
a	48	a	61	a	152	a	212	a	70	1	a	69	1	a	48	a	2
i	22	i	24	k	92	k	99	ng	27	2	k	49	2	i	22	k	4
k	22	k	22	r	79	o	92	i	25	2	o	49	2	k	22	o	8
ng	22	ng	22	o	74	r	89	ï	24	4	t	44	2	ng	22	r	10
r	20	r	20	i	63	ö	77	k	22	5	r	36	5	r	20	ng	12
n	19	n	20	m	59	i	66	o	22	6	ö	30	6	m	19	i	14
o	19	o	20	ö	58	m	61	m	21	7	b	26	6	n	19	b	16
m	19	m	19	t	56	ï	61	r	21	8	ï	24	6	o	19	ï	17
ï	16	uu	17	ng	49	t	57	n	20	8	p	24	9	ï	16	m	17
ee	16	ï	16	p	47	ng	56	uu	18	10	ng	23	9	ee	16	t	18
b	16	ee	16	b	47	b	47	ee	17	11	m	20	9	b	16	n	18
e	16	b	16	n	44	n	47	ö	16	12	i	18	9	e	16	ö	20
uu	14	e	16	ï	44	p	47	b	16	12	n	18	13	uu	14	p	25
ö	13	ö	14	g	36	uu	41	e	16	14	y	17	14	ö	13	e	25
t	13	t	13	ii	34	g	40	g	14	15	g	16	14	t	13	ee	26
g	13	g	13	ee	34	ii	37	t	13	16	e	10	14	g	13	g	29
p	12	p	12	y	33	e	36	p	12	17	ee	9	17	p	12	y	36
ii	11	ii	11	e	31	ee	35	ii	11	17	z	9	18	ii	11	uu	37
d	9	d	9	uu	26	y	34	d	10	19	oo	7	19	d	9	d	38
w	9	w	9	w	19	w	25	w	10	19	d	7	19	w	9	ii	39
s	7	s	7	d	19	d	21	s	7	21	ii	6	21	s	7	z	39
z	6	z	6	z	18	z	19	z	6	21	u	6	22	y	6	w	44
y	6	y	6	s	17	s	17	y	6	23	s	5	22	z	6	s	44
ch	4	ch	4	oo	12	oo	14	ch	5	24	uu	3	24	ch	4	oo	44
oo	3	oo	3	ch	8	ch	9	oo	4	25	ch	2	25	oo	3	u	46
u	3	u	3	u	8	u	8	u	4	25	w	2	25	u	3	ch	49
j	2	j	2	j	7	j	7	j	2	27	j	1	27	j	2	j	54

A similar pattern occurs in Chart 2. A combined list of the top eight phonemes in each count produces twelve items, six of which occur in all six counts. A high degree of overlap occurs in these initial eight slots. Many of those that do not have a high degree of overlap would be included if one or two more slots were added to the count. For example, *t*, which occurs as a priority phoneme in one count, would be a priority phoneme in three counts if two more slots were added, *n* and *ng* would be a priority in two more counts and *b* in three more counts.

I have proposed a method that is an attempt to balance the tension between including or excluding functors. The phoneme *ng* is evidence that this method has come close to reaching this goal. The three methods that exclude functors resulted in a high rating for *ng* (Gudschinsky and N/A second, Lee third). The two methods that include functors resulted in a much lower rating for *ng* (Weber ninth,

Baucom tenth). The Holbrook method ranked it at fifth, around the mid-point between the other two approaches.

3. CONCLUSION

Frequency counts are one tool to help determine the order of introduction of phonemes in primers. Six methods of frequency counts have been described and applied to a short text. These methods can all be categorized by three parameters: simple frequency versus appearance-in-word frequency, simple word count versus appearance-in-text word count, and including functors versus excluding functors.

When the goal is a rough discovery of which phonemes occur more than others, the size of the text is not critical. A larger text is preferable for methods using an appearance-in-text word count. The method used does not appear to be critical, since all the counts in this example had similar results. The method is not as important as what is done with the result.

Finally, Lee's advice, which was cited earlier, seems prudent. Do not put too much emphasis on, or time and energy into, frequency counts. Pick a method you prefer and use it.

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SMALLEY'S "MAXIMUMS" OF ORTHOGRAPHY DESIGN AND SIGN LANGUAGES

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1. INTRODUCTION

"You can't write sign language. It is a visual, three-dimensional system. You just can't put it adequately on two-dimensional paper." That is the attitude we have encountered in our work with the Deaf[1] in Mexico and in the United States.

Linguists recognize nearly 80 distinct sign languages in the world used by Deaf communities, but no one written form of signing is accepted. Several systems have received limited acceptance among small communities of Deaf and linguists, but most of the Deaf communities have rejected efforts to create a practical orthography for sign languages. Literature for the Deaf in the U.S., including Bible translations, has been recorded in video format, but video and other media are highly impractical as a means of producing meaningful texts for use in developing countries. If the Deaf in these countries are to have practical access to texts created or translated into their language, they need a written form.

William Smalley (1965) proposes five factors to consider when designing an orthography:

1. Maximum motivation. The proposed orthography should create maximum motivation for the reader to use that system.
2. Maximum representation. The system should represent the language as closely as possible.
3. Maximum ease of learning.
4. Maximum transfer. It should help the reader to learn more easily how to read and write other languages in the area.
5. Maximum ease of reproduction.

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[1]Throughout this study the term "Deaf" (capitalized) will refer to those who identify themselves as members of the Deaf culture. The term "deaf" refers to all people who are hearing impaired but may or may not identify with Deaf culture.

Not all of these "maximums" carry equal importance in a given situation, and it is likely that one maximum will conflict with another. Smalley stresses a balance. Each ideal must be considered and weighed according to the situation.

The purpose of this paper is to continue the investigation started by Karla Faurot, Dianne Dellinger, Andy Eatough, and Steve Parkhurst[2] on the development and use of a practical orthography for Mexican Sign Language (MSL)[3]. This paper examines some of the implications of taking Smalley's principles for orthography design seriously in the design of an orthography for sign. A variety of sign orthographies are in limited use, but none have been widely accepted as adequately practical. This paper is meant to be used as a tool for future study. It only looks at the issues involved and does not attempt to either fully critique current orthographies or design a new orthography.

2. CURRENT SITUATION

In March 1991, Karla Faurot and Dianne Dellinger began a survey of Mexican Sign Language as it is used throughout Mexico. They were later joined by Andy Eatough and Steve Parkhurst. The team concluded that MSL is relatively unified throughout the country, with only minor differences from city to city that do not seem to hinder communication (Faurot et al 1992). MSL, while historically related to American Sign Language (ASL)[4], is unintelligible to users of ASL (14% mutual intelligibility, 23% lexical similarity). MSL is also very different from Spanish in its lexicon and grammar (Eatough 1992). We noted that the majority of Deaf do not know Spanish adequately for understanding basic literature, nor is the educational system such that there will likely be any great change in education level and literacy rate for the Deaf in Spanish. For these reasons, the team recommended that texts for the Deaf be translated into MSL.

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[2]Albert Bickford provided additional help and direction in the analysis MSL and preliminary studies of orthography issues, which provided the basis from which this study has developed.

[3]There is no standard Spanish name for MSL. The Deaf in Mexico refer to it simply as "sign" but differentiate sign language used in Mexico from sign in the United States by referring to Mexican sign or Spanish sign.

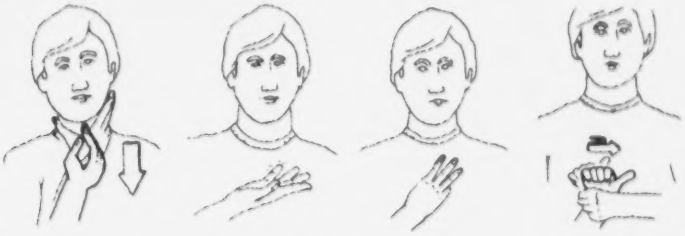
[4]It is traditionally believed that both ASL and MSL originated from French Sign Language within about 50 years: the United States in 1816 and Mexico about 1869 (Faurot 1992).

In the U.S., several publications in sign are currently being worked on in ASL using either English glosses for the signs with proper ASL syntax or videotaped signing. The glossed works assume that the signer has a functional knowledge of the spoken language so as to be able to associate a written word in English with a sign in ASL. In Mexico, most Deaf do not know enough Spanish to accurately utilize this type of glossed literature. Videotaped Bible translations would be impractical for private use and study, particularly in economically depressed areas, where people cannot afford expensive video equipment or the numerous tapes needed. After considering these restrictions and others, the team concluded that some written form of sign language, which does not presuppose the knowledge of the spoken language, is necessary.

3. CURRENT ORTHOGRAPHIES

Several orthographic systems have been proposed as a means to write sign two-dimensionally. The only system currently used in Mexico is strictly pictorial with life-like drawings made of a signer (usually from the waist up). This system utilizes a limited number of symbols and conventions, such as three-dimensional arrows and other markings for starting and ending positions for movement (Figure 1).

Figure 1. The Pictorial System



hombre 'man' *tener* 'to have' *tres* '3' *auto* 'car'

The man has three cars.

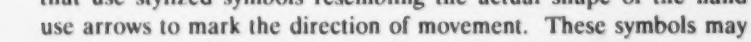
Another system uses a linear arrangement of letters, numbers, and symbols that correlate with the basic components of signs: handshape, movement, location, orientation, and prosodic components, such as facial expression and body orientation (e.g., the Stokoe System, Smith Stark (1987), Figure 2).

Figure 2. The Stokoe System

The man has three cars.

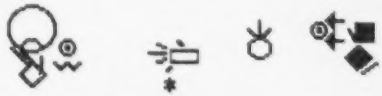
Between these extremes of representation systems are several others that use stylized symbols resembling the actual shape of the hand or use arrows to mark the direction of movement. These symbols may be arranged linearly, such as Sign Font (Newkirk 1987), Figure 3, or utilize real space, with symbols for the hands represented spatially in relation to symbols for the body or head, such as Sign Writer (Sutton 1990), Figure 4.

Figure 3. Sign Font



The man has three cars.

Figure 4. Sign Writer, PC Version 4.0



The man has three cars.

No one system is flawless or adequately meets the needs of the Deaf in Mexico. Before critiquing these systems or proposing another, we need a clear understanding of the issues involved. The issues are examined below in light of Smalley's maximums, especially as they apply in Mexico.

4. MAXIMUM MOTIVATION

An adequate writing system must provide "maximum motivation for the learner, and acceptance by his society and controlling groups such as the government." (Smalley 1965:34) If society, in this case the Mexican Deaf, does not accept the orthography, it will not be used. Going against government policies that relate to the use of the orthography will do little good for the community either!

The Deaf community has strong feelings of resentment toward the hearing world and the attempts to "make the Deaf person hearing." The Deaf reject inventions by the hearing designed to help the Deaf function as hearing persons. In Mexico and the U.S., writing is

considered a system for spoken languages. Any attempt to write sign language is viewed as a hearing person's idea. If the hearing write the language, then it is no longer a language solely for the Deaf. Sign language is one of the last strongholds of their culture. The skillful use of a pure form of ASL or MSL is often a criterion for membership in the Deaf community.

If the writing system is viewed as a hearing-world invention, it will never be widely accepted and used. Nearly all the current orthographies were created by hearing persons who wanted some way to write down the language as they were studying it. Even systems designed by hearing persons that have some Deaf support are still considered hearing inventions. An adaptation of current systems will probably always carry the stigma of being "hearing" even if the adaptation is done by Deaf persons. New systems invented by the Deaf specifically for the Deaf, would have a better chance of acceptance.

Another issue is the need for the orthography to be first accepted by the leaders of the Deaf community. In the U.S., the center of Deaf culture is Gallaudet University in Washington, D.C. When approached with the idea of a practical orthography, their reply was that the Deaf are "aggressively disinterested" in writing sign language. Though Gallaudet does not necessarily represent the attitudes of a majority of the Deaf, it is an influential force. The acceptance and promotion of a practical orthography by Gallaudet could insure acceptance throughout the world.

On a smaller scale, if an orthography is accepted by prominent Deaf leaders in other countries, it may be accepted by the Deaf in that country. The acceptance in one country could influence orthography acceptance in other countries. For this reason, an orthography should be adaptable to any sign language. Deaf leaders will not likely accept an orthography invented by hearing persons, or one that appears to be a tool to be used by the Hearing to manipulate the language for their uses.

What people want and what the government allows are sometimes in conflict. The Deaf want education in sign language, but the official position of the education authorities is strongly against its use in schools for the deaf. Nearly all government-sponsored deaf schools in Mexico use strictly oral instructional strategies, not allowing the use of sign to teach or for students to communicate.

The government has no reaction against material presented in a pictorial format. The office of Secretary of Public Education helped produce two dictionaries using an illustration and Spanish gloss format. A strict Spanish gloss system, however, gives the appearance of ungrammatical Spanish, making it inappropriate for use in the public schools. Systems that do not use a Roman script, yet are not clearly pictorial, may be objectionable since they do not clearly promote the use of Spanish. A simplified Spanish or a mixture of pictorial and simplified Spanish would gain the most acceptance by educators, as the pictures can be used to teach Spanish.

The conflict here is that the Deaf reject any system viewed as a hearing person's system or one that helps the hearing community reach its goal of assimilating the Deaf into the hearing culture. On the other hand, educators for the deaf do not accept a system that compromises their ultimate goal of assimilation of the deaf.

5. MAXIMUM REPRESENTATION

The orthography should maximally represent the language as it is used. For spoken languages, the sounds of the language are represented by letters with a rough one-to-one correlation of sound to symbol. Since sign languages are based on a manual/visual system, many deaf have an extremely difficult time reading a language based on sounds they cannot hear. A written system for sign languages should have one symbol for each distinct component or mixture of components of a sign. This means encoding handshape, orientation, direction and manner of movement, contact points, and prosodic features, such as body movement and facial expression. Strictly glossed versions are excluded as viable options because a lexical item depicted in a Roman script does not represent the sign in any concrete way.

The components of a sign have been represented in a variety of ways. Some have used the fingerspelled alphabet as a means of associating a particular handshape to a Roman symbol. Even in Mexico, where literacy among the Deaf is extremely low, most can accurately associate the handshape with the fingerspelled letter it represents. One problem comes from such an association: What does one do when the basic handshapes do not correlate with the fingerspelling conventions, or the language representation is nonalphabetic, such as Chinese? The two-handed signs for the fingerspelled words in British Sign Language do not correlate with the

basic handshapes of the language. In such a case, associating a Roman letter with a handshape is abstract and confusing for the Deaf. Some systems have utilized symbols for the handshapes that iconically resemble the actual shape of the hand. These symbols require special computer programs or typewriters, yet increase the correlation between the representation and the sign.

Motion can be represented iconically with the appropriate use of arrows. Other sign components are not so easily represented. Many have been represented by a wide variety of abstract symbols that can be represented on a standard typewriter or word processor. Few of these conventions have any iconic representation of the actual component of the sign.

Some current systems have arranged the symbols in a logical, linear format (Figures 2 & 3). For example, the order of symbols may always be handshape, orientation, manner of movement, etc. Other systems have utilized space iconically as a means of organizing the symbols. For example, the symbol chosen for the handshape can be slanted to match the actual orientation of the hand in signing (Figure 4).

The closest correlation between the sign and a written representation is through illustration (Figure 1). In this case, only a limited number of abstract symbols need to be used, such as three-dimensional arrows.

6. MAXIMUM EASE OF LEARNING

In preliterate societies, it is crucial to develop an orthography that is easy to learn. Granted, with the proper motivation, any orthography can be learned. However, if the people have gotten along without a written language for a long time, motivation to learn a complicated orthography may be extremely difficult. Many of the Deaf in Mexico are familiar with written Spanish and often function in the hearing society through the means of short written notes. Their level of literacy, however, is often extremely low. It is important to remember that the experience of learning Spanish for many Mexican Deaf has been a frustrating and often humiliating experience.

It has been suggested that once people have learned how to read, they never have to learn again; they need only to learn the new system, (a much easier task). This theory would apply more to the transition from one alphabetical system to another than to the transition from an alphabetical system to a logographic system, like Chinese. For this

reason, many of the proposed sign language orthographies have been largely alphabetical and linear.

Sign language, however, does not easily lend itself to a linear system. Speech is produced in a largely linear fashion where one sound flows into another in a single stream, but the elements that make up a sign (handshape, orientation, movement, point of contact and prosodic features) often apply to a sign simultaneously. Only movement (and possibly point of contact) can be measured linearly. Nonlinear orthographies represent sign language much more accurately than do linear systems.

Abstract symbols place a stronger burden on the memory than do symbols that have a more direct representation of the sign. For example, if we wanted to make a road sign telling people to turn to the right, we may devise three options: (1) pick a completely abstract symbol such as a strawberry and teach people to turn right when they see it, (2) use the letter *R* to help people associate the symbol *R* with the word *right* signaling them to turn right, or (3) use the known convention of arrows to point in the actual direction we wish them to turn. One might expect the third option to be the most effective and the first option to be the hardest. Spoken language has few options in writing a language iconically. Many elements of sign language, however, can be represented accurately using illustrations and standard conventions, like arrows. The organization of the symbols can also be done in an iconic way that represents orientation, movement, and points of articulation. The ease of learning based on iconicity and lack of need for memorization may well make up for the complications in transferring from a linear system to a nonlinear system.

Accurate illustrations and the use of known conventions to represent signs require little outside instruction for the knowledgeable signer. In other words, little or no actual literacy teaching needs to be done. A knowledgeable signer can pick up a text of illustrated signs and with no prior exposure, "read" the signs with relative ease and accuracy. Material printed in this way is immediately available to any person who knows the language. No literacy program is needed to teach people to read the literature.

7. MAXIMUM TRANSFER

Transfer refers to choosing symbols that have qualities similar to the symbols used in the national language or a language of contact.

That way, when a person wants to learn to read the national language, he or she already knows what that symbol represents. For this reason, many of the current sign orthographies use initialization as a means of labeling handshapes. As mentioned before, the use of fingerspelled handshapes as a means of distinguishing basic handshapes is not a universally usable system. However, for most sign languages (at least those based on the French system) this is one way to work toward a transferable orthography.

As discussed above, the linear organization of symbols increases the transferability of the orthography. Yet, any gain in this area is lost in the area of optimum representation and learnability. Educators in Mexico trying to stifle the use of sign in schools are not likely to want any orthography for signs. However, they may possibly accept a system that promotes the easy learning of Spanish. The Deaf, on the other hand, feel very negative toward any system that they perceive the hearing could use as a tool against them. For this reason, maximum transferability ranks fairly low in importance for the design of a sign language orthography.

8. MAXIMUM EASE OF REPRODUCTION

The ease of reproduction is the last and least crucial factor. If the choice is to make an orthography easy to use or easy to produce, the burden of difficulty should always be placed on the producer, not the user.

The world is rapidly adopting computer technology to do things that only ten years ago seemed impossible. For example, the option of using illustrations as a practical means of printing a language seemed virtually impossible only years ago. However, with the modern technology developed for the fields of architecture, engineering, and advertising design, a program could be adapted to generate consistent, high-quality illustrations with relative ease. As the Sign Writer programs show, nonlinear approaches can be generated on standard personal computer equipment. We live in an age of technology when few things are impossible.

Cost, however, complicates this issue. The more complex computer programs are expensive and require equipment not available to the vast majority of the Deaf or those who work with the Deaf. To seriously consider the implications of costly or difficult production, one must consider how the writing system will be used. If the orthography is solely for the production of printed literature, cost and

difficulty are of lesser importance. However, if the orthography is to be used also as a standard form of communication between the Deaf, then everyone should have the means to use the orthography.

The Deaf in Mexico and in the U.S. do not see a need to write their language, and videotaping is used for recording texts of literature and history. Particularly in the U.S., information for the Deaf community has been recorded in glossed forms or in simple English. In Mexico, where literacy in Spanish is low, many Deaf know enough written Spanish to keep records and write short notes to communicate the ideas they need to communicate. The greatest observed need is to record the Bible and other important texts in an accurate and understandable way. Since the new orthography will be used only for printed materials, difficult reproduction may truly be less of a concern.

9. CONCLUSION

This study has examined five considerations important in the design of an orthography. Motivation is the most important consideration. The conflict between what the Deaf want and what hearing educators want remains unresolved. Yet, if the orthography is not accepted by the Deaf, it will never be used. It will be easier to convince government authorities of the usefulness of a Deaf-approved system than to convince the Deaf to use a system they oppose. The need to develop an acceptable orthography overrides the need for maximum transferability and even maximum ease of learning.

Maximum ease of learning and maximum representation point to a nonlinear, non-Roman system. A strictly pictorial system requires no literacy training and is currently the only accepted form of writing signs. However, this conflicts with the maximum of ease of reproduction. The ease of reproduction becomes a major factor if the Deaf wish to use the system for anything other than for printed material.

It is clear that the ultimate decisions about the orthography should be made by the Deaf community. They need to set the priorities between conflicting factors and create the correct balance of the five areas. Those making the decisions need to be aware of the concerns discussed here. Keep in mind that regardless of the decisions made, changes will inevitably be made later. Our job as applied linguists is to facilitate those decisions. We need not wait until Deaf communities all agree on one perfect system before we produce literature. Perhaps one system will start the process and gradually a more abstract writing

system will develop. The Deaf need literature in their own language in a form available to all the Deaf. Yes, it is possible to write sign language. It may not happen overnight, but the process must start. It must start now.

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TEACHING A CONCEPT: A MODEL

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1. INTRODUCTION

When the proud Machiguenga teacher raised the Peruvian flag for the first time near the village school deep in the Amazon jungle, a woman observer asked, "Why is he putting that cloth up on the stick? Does he need to dry it out?"

The naive observer may laugh, but the problem is very real. How do we teach the concept of a flag when such symbolization does not exist? Or how do we communicate effectively when our definition of a specific concept differs from that of those with whom we are trying to communicate? Take *time*, for example. In *Notes on Literacy* Special Issue No. 3, Patricia Davis points out:

> Time systems vary from culture to culture. The Mundani of the Republic of Cameroon divide time into eight-day weeks. Some distance away, the Noni and Bubango conceive five-day and three-day weeks instead (Davis 1987:2).

Davis went on to conclude that:

> Effective educators will seek to identify and to accommodate the student's conceptual framework as well as to employ traditional strategies for teaching, whenever possible. If a new concept or strategy is introduced, explanations will be provided, along with demonstrations, and time will be allowed for the student to internalize the procedure (p. 8).

This paper provides a model for teaching concepts that will help indigenous people to understand new concepts, enabling them to compare their cultural understanding of a concept with that of others. Because the model and teaching strategy remain the same no matter how different the concept, indigenous teachers will find it easier to teach concepts, and that, in turn, will help the students.

The term *concept* has been used in a variety of situations in educational literature. For the purposes of this paper, *concept* will be defined as a

> . . . particular kind of abstract idea which: (1) defines a category or type of object, action, or property, (2) is used to classify items as members or non-members of a category or to compare items across cases, (3) consists of a list of characteristics which are common to all examples of the concept and sufficient to distinguish examples from non-examples, (4) is symbolized by a single word or pair of words" (McKenzie 1979:129).

2. ESTABLISHING A COMMON CONCEPT BASE

Literacy workers everywhere realize the extreme importance of meaning for comprehension of facts. Most of us are aware of the two levels of learning—surface and deep—in which surface level learning is memorization of facts while deep level learning is understanding the conceptual ideas that make facts meaningful by helping to organize them (Foster 1986). As literacy workers struggle to increase comprehension, they need to be aware of teaching on both levels, factual and conceptual. Concepts are influenced by the learner's personal intellectual activity and by the cultural transmissions on the part of adults in their group (Goodman 1990). When communication, and especially learning, is attempted across cultural boundaries, problems often arise. Many of those problems are due to conceptual miscommunications. Lancy (1983) feels that formal categorization "permits communication with those who do not share one's daily experiences or actions" (p. 66). Lancy's assumption is that a shared understanding in the form of a *formal* category or concept will enable understanding. This assumption is supported in an excellent article by Tennyson and Park (1980) in which they review literature directly related to the teaching of concepts. Tennyson and Park cite an article by Johnson and Stratten which indicates that "students who are given a definition perform significantly better on classification of new examples" (p. 57). Although this research relates to American school children, definitions would be even more necessary when there are vast cultural differences and thus, differences in definition.

Tennyson and Park propose a four-step process for concept teaching:

1. The taxonomic structure of the content should be determined. The three levels of concept structure—superordinate, coordinate, and subordinate—should be

analyzed with identification of critical and variable attributes.

2. A definition of the concept should be prepared in terms of the critical attributes, and a pool of examples should be prepared on the basis of critical and variable attributes.
3. The examples should be arranged in rational sets by appropriate manipulation of the attributes.
4. The presentation order of the rational sets should be arranged according to the divergency and difficulty level among examples of the concept, and the presentation order of the examples within rational sets should be decided according to updated information about the learner's knowledge state (p. 65-66).

3. THE MODEL

Using the proposed process from Tennyson and Park and others, and some rules for guiding study from Gagne (1985) and Rothkopf, McKenzie has developed an algorithm for teaching a concept (McKenzie 1992 class notes).

By using his step-by-step procedure which follows, establishing the taxonomic structure is relatively easy. Take our example of the flag. The *superordinate*, which McKenzie refers to simply as domain, would be a symbol. *Coordinates* would be items such as shields, emblems, and insignias. *Instances* are examples of the concept or individual flags in our example.

However, literacy workers may find it necessary to develop not only the Western taxonomic structure, but the indigenous one as well. Many such workers have discovered that these taxonomies are not the same. Too, some indigenous groups have a sense of a hierarchy, but no labels for them. While individuals might be able to agree on relationships of items, no vocabulary exists that shows the relationships. For example, a culture might group vertebrates separate from invertebrates yet not have words equivalent to vertebrate and invertebrate. An example is the Tzeltal taxonomy of plants explained by Berlin, Breedlove, and Raven (1968). Another problem encountered is that some indigenous groups, for example, the Kewa of Papua New Guinea, have categories, but they are not mutually exclusive and are not part of a hierarchy (Lancy 1983). In each case, the problem is to find a way to relate the new concept logically to a larger framework of terms in the learner's mental filing system. Since

these structures of knowledge vary between cultures, it is difficult to be more specific than to say the domain of the concept selected should relate to a class of thing known about already by the learner, with the new concept more specifically designated.

What follows is McKenzie's model for teaching a concept. Each section includes the teaching strategy, an example, and a discussion of strengths, weaknesses, and ideas for implementation. A complete concept lesson plan teaching the concept of *week* is shown in the appendix.

Step 1. Definition of Concept

Teaching strategy. Define the concept in writing, listing defining characteristics and using the following form:

State (concept)
A kind of (name domain) with:
1. list attribute 1
2. list attribute 2
3. list attribute 3

Example.

flag: a kind of symbol of a group:
1. made of cloth
2. with colors that represent elements important to the group
3. with a design that represents the group

Discussion. When introducing a concept, the definition should be stated in a simple, easy-to-remember form like that above, which states the term, states the domain or superordinate to which it belongs, and lists the critical attributes or characteristics common to all members of the class. This allows the students to use the domain and critical attributes as a checklist which is easier to understand than a traditional dictionary definition. The problem is that definitions are "rarely stated in this form in printed materials so the teacher will need to make up clearer definitions than are given" (McKenzie 1979:139). In cross-cultural situations, this will need to be done by the linguist or literacy worker. Do not expect teachers to be able to do this immediately. They may be able to do so after they have become familiar with the teaching strategy and have gained confidence in describing concepts by their attributes or characteristics.

Perhaps the hardest and most important step in the concept strategy is to state the meaning of the concept to be taught by listing attributes that define the concept class. That is, you will

have to list properties or characteristics that pupils can see in examples, which must be present in the example, and which distinguish the object from non-members of the class. And that is just as hard as it sounds. For example: . . . What is the definition of city, and how is it distinguished from towns and metropolitan areas? (McKenzie 1979:139).

After listing some cases you know are examples of the concept,

. . . list the properties that are common to all the examples and distinguish them from non-examples. For example, define *city* by thinking of some you know, and non-cities.

A city is a kind of community that: is fairly large . . . certainly larger than a town of 10,000 people and has different areas in it . . . residential areas, business areas, industrial areas, etc. and they are incorporated into a governmental unit and they have definite boundaries marked as city limits.

Now that may not be the world's best definition, but it is workable and [students] can use it to decide if a given place is a city or not by checking population, neighborhood variety, governments and limits. Note that all cities do have houses . . . and must have houses . . . but that houses are not useful characteristics to mention in the definition since farms have houses and so do metropolitan areas . . . and houses are covered by *community*. Only list critical distinguishing attributes (McKenzie 1979:140).

Step 2. Statement of Objective

Teaching strategy. State the objective to require classification on new examples.

When given examples and non-examples of <u>(concept)</u> which have not been discussed and asked to classify them, students will classify 80% correctly (and be able to explain decisions by the definition).

Example. When given examples and non-examples of flags which have not been discussed, students will be able to identify at least 80% of the cases (and be able to explain decisions by the definition).

Discussion. Learning a concept is more than just memorizing a definition. When students can use an idea to decide whether a new item is an example or not, understanding of the concept is demonstrated.

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Step 3. Establishment of *Set*

Teaching strategy. *Set* should inform students that they are to learn a list of characteristics and use them to classify new examples. This may be done by presenting a variety of unlabeled examples and non-examples and telling students that they will be asked to decide which are (the concept term) and which are not by checking to see if they have all the necessary characteristics (McKenzie 1979).

Example. "Today you will learn to tell whether a symbol is a flag or not by learning what to look for in deciding."

Discussion. *Set* is the attention-getting device used with students that helps them know what they will have to learn in the lesson. In the concept lesson, they must remember a list of characteristics (not a list of objects) and be able to use them to classify new examples.

Step 4. Presentation of Definition

Teaching strategy. Present the definition to pupils in the form stated in step 1. Writing the definition on a chalkboard, posterboard or overhead transparency will be helpful to students.

Example. See example in Step 1.

Discussion. Though most people have a highly developed memory, providing the definition in checklist form is often helpful because the list form helps learners use the definition systematically in deciding if a new case is an example of the class. If the students are nonliterate or beginning readers, you may use pictorial symbols for each attribute that students can use as a checklist. See Chart 4.

> There may still be a problem with the definition, and this is that the students may not understand the meanings of the words used in the list of characteristics and be able to recognize examples of these sub-concepts in new instances. The problem is that concepts are defined in terms of other concepts. Obviously one should state attributes in the form of words [your students] understand . . . if possible. Unfortunately you never can assume students know a term, and sometimes it is not possible to find a term they do know. So you have to make sure they know what you mean by each term in the definition by teaching each one. This can be done rather efficiently (McKenzie 1979:142).

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Step 5. Presentation of Examples

Teaching strategy. To illustrate the meanings of the words in the definition show the ideal case and point out each attribute as it is named (Chart 1). Then repeat this procedure with a variety of examples of the concept to show extreme forms that examples may take, and point out the critical attributes by having the students fill in a comparison chart (Chart 2). Recording the attributes in a comparison chart helps learners recognize that all examples have the same attributes. It also gives the students practice with the definition, helps them detect characteristics and prove the pattern.

Chart 1

	Domain	+ Char. 1	+ Char. 2	+ Char. 3	= Concept
Ex. 1					
Ex. 2					
Ex. 3					
Ex. 4					

Example.

Chart 2

	symbol	+ cloth	+ color/grp.	+ design/grp.	= Flag
Ex. 1 Peru	X	X	red & white	seal of Peru	flag
Ex. 2 Red Cross flag	X	X	red & white	cross = first aid	flag
Ex. 3 USA	X	X	red, blue, white	Stripes = 13 colonies	flag
Ex. 4 Brazil	X	X	green, blue, yellow	Stars = States	flag

Discussion. Because concepts possess many attributes, students need to be shown numerous examples in order to prevent undergeneralization, or failure to recognize that other cases which have differing nonessential variables are also members of the set. A wide variety of extreme examples will help students to realize the breadth of the concept. Remember that pictorial symbols can be used effectively here, as in Chart 4.

Step 6. Presentation of Non-examples

Teaching strategy. When students seem to see the pattern, present a non-example stating, "This is not a (concept) because one necessary characteristic is missing." Fill out the chart in order for students to identify which characteristic is missing. Repeat to prove that each defining characteristic is necessary.

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Example. See Chart 3 for a written example. For a pictorial example, see Chart 4.

Chart 3

	symbol	+ cloth	+ color/grp.	+ design/grp.	= Flag
Ex. 1 Peru	X	X	red = blood shed	seal = government	flag
Ex. 2 Red Cross flag	X	X	red & white	cross = first aid	flag
Ex. 3 USA	X	X	red, blue, white	stripes = 13 colonies	flag
Ex. 4 Brazil	X	X	green, blue, yellow	stars = states	flag
N-Ex. 1 Uniform shirt	NO	X	school colors	school insignia	not a flag
N-Ex. 2 USA Quarter	X	NO	NO	American eagle	not a flag
N-Ex. 3 Seal	X	NO	green, gold, white	natural resources	not a flag

Chart 4

Pictorial example:

	symbol	+ cloth	+ color/grp.	+ design/grp.	= Flag
Ex. 1	X	X	(Use crayons to show		
Ex. 2	X	X	colors)		
Ex. 3	X	X			
Ex. 4	X	X			
N-Ex. 1		X			
N-Ex. 2	X				
N-Ex. 3	X				

Discussion. Overgeneralization, or the extension of a concept beyond proper limits to call items that are not examples by the concept term, is as much a problem as undergeneralization. Overgeneralization can be overcome by giving a number of non-examples. Ideally and logically, one should show a case in which all of the distinctive characteristics but one are correct. As you can see in the example above, that may not always be possible. If it is impossible, an option might be to make up a hypothetical case: e.g., "Fernando took a piece of blue cloth to symbolize bravery and put it on a stick. He said the blue represented the Piro people. Why wouldn't that be a flag for the Piro people?" (Elicit the answer that unless it has a unique design, it could represent many different groups.)

Step 7. Presentation of Unlabeled Cases

Teaching strategy. When students have seen each characteristic proven, present a new, unlabeled case and ask the students to decide if it is or is not an example. Require each student to raise a hand to classify the example as representing the concept being studied. Ask why, and verify the correct answer. Repeat interchanging examples with non-examples until the students make few errors.

Example. "Now students, let's see if you can tell whether some new things are flags or not by using the checklist you have just learned. The French use a blue cloth with gold fleur-de-lis on it to symbolize their country. Raise your hand if you think that is a flag. (Pause, glancing around at answers.) Good. Almost everyone thinks it is a flag. Why did you think that, Hig? (Elicit response.) Very good. It was a flag because it was a symbol of France, it was made of cloth, and had colors and designs that represent France." Repeat interchanging examples with non-examples until the students make few errors.

Discussion. The purpose of this step is to provide students with practice in using the definition to classify new cases. They will need to learn to use the chart carefully and prove that the definition extends to new cases. Except for the statement of the definition, the test-like event (Step 8) is the most important single step in a concept lesson. It forces the students to apply each idea in the definition to a new case and thus generalizes the students' idea of what each term means. It trains them to use the definition as a checklist and provides feedback about what correct answers should be. By explaining why an item is an example or non-example, individuals are allowed to clarify and correct any misapplications. It also allows the teacher to estimate

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informally which students have mastered the idea and allows him or her to isolate and correct errors, and most importantly, it assures that most students will score high on a final test by withholding the formal test until most students can classify the concept examples accurately.

Step 8. Formal Evaluation

Teaching strategy. Test by using the same kind of questions as in Step 7, but without the feedback and with new examples. If students are literate, you might want to have them write down the concept if it is an example. If it is a non-example, have them write *No* and name the missing characteristic.

Example.

1. flag
2. no, not cloth
3. flag

Discussion. If the teacher does all of the other steps well, student scores should be quite high and they should feel quite successful.

> Concept achievement tests can be made diagnostic by making about half of the new cases proper examples, and then making up two or more non-examples which omit only the first characteristic, two or more non-examples which include all but the second characteristic and so on. Then in grading, if the student misses all the non-examples that omitted characteristic 2, you know that he failed to notice or understand that particular characteristic, and you know how to help the student most efficiently (McKenzie 1979:148-9).

4. CONCLUSION

Introducing a new concept will never be an easy matter, but with the McKenzie model shared above, the concept lesson can become more than surface level memorization of facts. Instead, students will demonstrate deeper learning through the application of the definition in the form of a checklist to identify examples and non-examples.

Preparation and development of materials may be more time-consuming initially as one struggles with taxonomies and critical attributes, but the end result will be gratifying enough to compensate for that initial effort. Students will have a better understanding of the concepts and you may find that they learn them more rapidly as well.

APPENDIX

SAMPLE CONCEPT LESSON: *WEEK*

Objective: When given new short stories that measure time and asked to classify them as week or nonweek, students will be able to do so with 70% accuracy.

Set: Inform students that there are numerous ways to measure time. One of them is a week. The purpose of today's lesson is to learn the definition of week and to be able to use that definition to decide whether a measure of time is a week or not.

(Display an item from the test-like events as a prequestion.) Explain: "At the end of the lesson, I'll give you little stories like this and ask you to decide if it is a week. What you will have to do is remember a list of things that all weeks must have and use that list to check and see if the story has all the necessary parts. If it fits the list exactly, it is a week. If something is missing, it isn't a week. How many of you think this is a week? How many of you think it isn't? How many aren't sure?"

Presentation. Display the following definition.

A week is a measure of time that:

1. *is of several days' duration.*
2. *is measured by days.*
3. *repeats itself in a continuous cycle.*

Explain that the domain and attributes must all be true if a measure of time is to be a week.

Examples. The teacher explains the following examples of week and fills in the chart (Chart 5).

Chart 5

	Measure of time	+ Char. 1 Duration	+ Char. 2 Days	+ Char. 3 Cycle	= Week
Ex. 1 West	X	X	7	X	YES
Ex. 2 Bubango	X	X	3	X	YES
Ex. 3					
Ex. 4					

1. In the western world, short lengths of time are measured in seven (7) day cycles.

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2. The Bubango people in Cameroon, West Africa, go to three different market towns on three consecutive days. They measure time by this short cycle.

Non-examples. Explain that students must be careful, because if one part is missing, it is not a week. Give the examples and fill in the chart as shown in Chart 6.

Chart 6

	Measure of time	+ Char. 1 Duration	+ Char. 2 Days	+ Char. 3 Cycle	= Week
Ex. 1 West	X	X	7	X	YES
Ex. 2 Bubango	X	X	3	X	YES
Ex. 3 Month	X	NO	30-31	X	NO
Ex. 4 Vacation	X	X	10	NO	NO
Ex. 5 1 Day	X	X	NO	X	NO

Ex. 3. Time is often measured in cycles that are 30 or 31 days in length. But that is not a short duration, so it is NOT a week.

Ex 4. The Walker family took a short vacation for 10 days. But a vacation is not a cycle so it is NOT a week.

Ex 5. We can measure time in short cycles of 24 hours. But because it is not measured by days, it is NOT a week.

Test-like Practice. Explain to the students that now you will present some new cases and that they will have to decide whether or not the example is a week. Instruct them to listen carefully, check the list of characteristics and then have them raise their hand to indicate whether or not they think it is a week. After each case has been identified, ask why, and confirm the correct answer.

1. "The Mundani people of Cameroon have market days on an eight (8) day cycle. They use this short cycle to measure time. Raise you hand if you think this is an example of a week." (Pause, observe) "Why?" (Confirm a correct answer.)
2. "The Western world divides time by 5 days for work and two days for pleasure. Raise your hand if you think the two days are an example of a week." (Pause, observe) "Why not?" (Confirm a correct answer.)
3. "The world revolves around the sun once every 365 days. This cycle repeats itself continually. Raise your hand if you think this is

an example of a week." (Pause, observe) "Why not?" (Confirm a correct answer.)

4. "The Noni people of Cameroon use a five (5) day cycle as a short measure of time. Raise your hand if you think this is an example of a week." (Pause, observe) "Why?" (Confirm a correct answer.)

Repeat this process with more examples as needed. The teacher will be able to tell if more practice is necessary by watching the students' responses.

Final Evaluation. When most of the students can identify a week using the checklist given above, they are ready for a final evaluation.

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ABSTRACT

Miller, Kathryn E. 1984. Functional literacy: Why and what difference? M.A. thesis, University of Pennsylvania. 74 pages. (Available from the editor, *Notes on Literacy*)

Kathryn Miller did informal literacy work among the Tzeltal of southern Mexico while part of SIL Jungle Camp staff 1970-1976. She did research on vernacular literacy training courses of SIL and the National Literacy Course in Papua New Guinea 1986-1988. She now teachs English as a Second Language to adult immigrants at Northampton Community College in Bethlehem, Pennsylvania.

In 1974, 23 million, or twenty percent of the American adult population was considered to be functionally illiterate. Even though this group included immigrants and refugees, the figure was shocking because many were native-born Americans. Since this ubiquitous group is not decreasing in numbers, functional illiteracy is currently a "hot topic," especially among educators and politicians. They want to know how such a situation can exist in our literate society. This study attempts to address that problem. We will take a glimpse into the lives of functionally illiterate adults to find out why they want to learn to read and what difference being able to read makes in their lives.

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REVIEWS

Adult literacy: Contexts and challenges. By Anabel Powell Newman and Caroline Beverstock. Newark, DE: International Reading Association. 1990. Pp. 218. Paper $12.50.

Reviewed by Deanna Manning

Whether you have a professional career in literacy that stems back many years, or are taking your first class in the basics, this book is for you. Published in 1990 (The United Nations International Literacy Year), the purpose of the book is to

> . . . discuss the history of the adult literacy movement, especially in America, and the emergent definitions of adult literacy. We report on the scholarship about, practice of, and challenges confronting the adult literacy movement. In addition, because we believe that communication, cooperation, and collaboration are essential if progress is to be achieved, we outline the current status of the National Coalition for Literacy and other initiatives.

The authors start with the premise that adult literacy affects everyone in one way or another. They add that all literacy instruction also must consider the cultural environment and its perspectives. Though this text deals directly with the U.S., the definitions and conclusions drawn here can be applied worldwide as well. Each of the eight chapters is well written, and is filled with information (history, statistical research, organization lists), negating the need to search many sources for the same information.

Chapter 1, "Adult Literacy: A New American Value," shows that the consideration of cultural values demands that literacy materials be more than merely generic. The authors review the past concepts of literacy in America from social, cultural, societal, economic, and employer/employee perspectives.

Chapter 2, "What Literacy Has Come to Mean," shows the U.S. Census Bureau's and the United Nation's Educational, Scientific and Cultural Organization's (UNESCO) definitions of literacy over the past century. The definition of literacy has changed significantly to accommodate the multiple facets of literacy. The chapter contains an excellent chart showing how the different definitions relate to each other.

Chapter 3, "Measuring America's Literacy," tells how to answer the question "How many illiterate people are there, anyway?" Statistics from testing, signatures, and census reports are related to sex, schooling, and occupations, but the statistics are inadequate. The chapter compares the information from seven national studies, such as the Functional Reading Survey, Adult Literacy Performance Testing, and the English Language Proficiency Survey.

Chapter 4, "The Emergence of Thinking about Adult Literacy," my favorite chapter, discusses the early twentieth century literacy pioneers, such as Fitzpatrick, Stewart, Gray, and Laubach. It also discusses the mid-century greats such as Gudschinsky, Freire, Brown, and Newman (one of the authors). It also tells of the efforts of the military, the Appalachian Adult Education Center, and the British Broadcasting Corporation. The chapter concludes with good case studies.

Chapter 5, "AL Research: Surveying a New Field," reviews literacy in relation to academic study. Topics include funding, new questions, and an overview of current adult literacy programs in the United States. It presents data on intergenerational family programs, community-based education, and the impact of literacy on the workplace. Case study close-ups and innovative uses of new technology are presented.

Chapter 6, "The National Coalition for Literacy," tells everything you wanted to know about the NCL, including their history, campaigns, volunteer efforts, and 1987 objectives.

Chapter 7, "Literacy Initiatives," describes current providers, such as the International Reading Association, Laubach Literacy Action, booksellers, publishers, libraries, universities, businesses, and private foundations.

In Chapter 8, "The Challenges of Adult Literacy," the authors address the issues of the challenge. Is literacy reaching crisis proportions? Do demographic shifts really tell us anything? What are the new questions? These and other questions lead to the many recommendations at the end of the text. Newman and Beverstock restate past recommendations and add a few of their own. The challenge to the literacy worker is to "continue to question, discuss, and change our approaches to meet the needs of adults who want to become more literate."

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Though this book is full of statistics, theories, and case studies, I found it informative and easy to read. The bibliographies after each chapter make it a good literacy reference guide. The authors state, "We are convinced that the growing pains of adult literacy in America are more an opportunity than a problem." After reading *Adult Literacy*, I am convinced of that as well.

Learning to read: Basic research and its implications. Edited by Laurence Rieben and Charles A. Perfetti. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers. 1991. Pp. 213. $40.00.

Reviewed by Holly Hong

Learning to Read: Basic Research and Its Implications is a collection of writings by fourteen authors explaining their research on how children learn to read. Part I (Chapters 1-3) "Principles and Theories," provides general theoretical shape to the issues of beginning reading. In Chapter 3, Perfetti presents a theory of reading acquisition that emphasizes the child's development of lexical representations. He argues that learning to read does not involve learning rules but is a matter of incrementing a store of graphemically accessible words. He divides phonemic knowledge into two types: computational knowledge and reflective knowledge. He concludes that reflective knowledge, or what is typically considered *phonemic awareness*, develops in mutual support of reading acquisition. The most explicit manifestations of this reflective knowledge depend on prior reading acquisition, whereas less explicit manifestations precede and enable acquisition.

The four chapters of Part II are concerned with the very beginning steps of learning to read. In Chapter 4, Gough and Juel share their findings on how a child first comes to recognize words by a process of *selective association* before moving on to the *cipher* stage of recognition. From experiments with 32 preschoolers, they found that the children learned to recognize a word by selecting an extraneous cue, ignoring the word itself. This means that if a word is accompanied by a salient extraneous cue, the child will select that cue and will not come to recognize the word without it.

Chapter 7, by Rieben, Meyer, and Perregaus, reports on a first-grade classroom activity, in which a whole classroom creates a story for classroom display. Each child writes his or her own version of the

story by going to the classroom display to search for the needed words. The study analyzes individual differences in word-search strategies and differences in a child's developing knowledge of graphemic-phonemic correspondences with already available semantic and contextual strategies.

The four chapters of Part III focus more on phonological abilities. In Chapter 10, Alegria and Morais present an analysis of the relationship between segmental analysis and learning to read. They conclude that this relationship is highly interactive because only through reading an alphabetic orthography is speech segment discovery encouraged. They agree with Mann in Chapter 9 that a causal role for phonemic knowledge is acquired in the reading environment.

Part IV includes three chapters that addresses reading disabilities. In the final chapter, Vellutino and Scanlon compare three methods of teaching word identification to skilled and less-skilled readers of different ages. The results include the finding that a combination of *phonics* and *meaning-based* approaches was more successful than either one alone. Vellutino and Scanlon conclude that a child's approach to word identification is significantly influenced by the method of instruction, and that *disabled readers* are the ones least likely to overcome the shortcomings of instructional methods.

The book represents the careful analytic work that is beginning to characterize the field. I am sure that some of this work will influence the kinds of research questions asked next, and will make a difference in the way instructional issues are formalized.

Insult to intelligence: The bureaucratic invasion of our classrooms. By Frank Smith. New York: Arbor House. 1986. Pp. v, 289. Paper $15.00.

Reviewed by Gwen Kehler

In *Insult to Intelligence*, Frank Smith attacks our educational system and the materials offered to and imposed on teachers and students. Smith is accomplished in diverse fields of study and has served as a Professor of Education at the Universities of Toronto and Victoria. He states that the educational program is often credited with any learning achieved, while students and teachers are blamed for the failures. Smith, however, places the blame for lack of learning and

motivation on the program rather than on the participants. This is reflected in the quotation, "To see what students learn in school, look at how they leave school. If they leave thinking that reading and writing are difficult and pointless, that mathematics is confusing, that history is irrelevant, and that art is a bore, then that is what they have been taught (p. ix)." The theme of trusting teachers to teach and trusting students to want to learn is referred to throughout. Smith advocates that "you can only teach by creating interest, by creating an urge to know. The knowledge has to be sucked into the brain, not pushed into the brain" (p.72).

Smith's objectives for writing this book are:

To catalog stupidities committed by ignorant though often well-intentioned people who impose meaningless tasks and demeaning tests on students in the expectation that worthwhile learning will occur.

To demonstrate the fluent way in which all children—and older students—are naturally capable of learning.

To show how teachers and parents can protect students from programmatic instruction.

To provide ammunition for the political battle that teachers and parents must wage if education is not to fall totally into the hands of the outsiders.

The first objective is illustrated with classic and amusing examples showing how ridiculous the exercises are that students are given to do. Smith describes these exercises with the phrase *drill and kill*. The basis of this type of instruction is the assumption that if learners are presented with one item after another and tested to ensure that each item is learned before they can move on to the next step, then learning can be guaranteed. As the book progresses, the issue of constant testing is placed under scrutiny. "Children are measured, treated, manipulated, modified and measured again" (p.165). Under the smoke screen of excellence, the education in schools gets worse.

Chapter 2, "The Learners Club," describes how children learn. They learn all the time and without the stress that comes from trying to learn and failing. Children learn what makes sense to them by observing what others do. The criteria of learning clubs include:

No restrictions.
No coercion.
No status.
No grades.

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Joining *clubs* as the way to learning is demonstrated by the "Spoken Language Club" and the "Literacy Club." To join a club, there are no special requirements for admission. The more experienced members do not teach but rather help newcomers to engage in the club activity without coercion. Members are not forced into activities or denied participation in them. The teacher is a club member and does not expect special status. Club members cooperate because they enjoy the activity, not because of grades.

He also addresses the question of why learning sometimes fails. Two reasons mentioned are lack of understanding and learning disabilities. Trying to learn something that does not appear to make sense often causes failure. "None of us can learn something that we don't understand, that we are not interested in, or that we don't see as the kind of thing people like ourselves learn" (p.53). Smith refers to learning disabilities as a myth. The key to learning is interest and if children are bored or distracted, something is wrong with our schools, not with children's brains. A few children may have extra difficulty with school subjects, but this should not cause automatic labeling as "learning disabled".

I was eager to reach the chapter titled "Good Teaching: The Practical Alternative," with the thought of finding the correct approach to teaching, but the author's philosophy does not allow this. Smith prefers not to give teachers specific recommendations, arguing against the notion that outside "experts" should tell teachers what to do, or that teachers should expect to be told. He gives, however, some suggestions and several examples. Good teachers give the impression that they would engage in the activity they teach even if they were not teachers; they are interested in what they teach and they enjoy working with learners. Good teachers accept their students into the various learning clubs.

Another topic of high interest and perhaps some controversy is "The Promise and Threat of Computers." Smith points out that every profession other than education uses computers productively and creatively. Several educators regard computers in education as frills or extras. Student teachers still graduate without ever using a computer or knowing what opportunities this technology could offer the classroom. The danger of using computers is not the computer, but the thinking of many experts who impose unimaginative ways of using it.

The book concludes by probing the issue of what teachers and parents need to look for in education, and how parents can become involved. Smith lists three stages of transforming teachers from classroom managers to effective leaders:

Learning to tell the difference between programs and tests, and worthwhile learning activities.
Changing what can be changed.
Being honest with students.

The basic and essential rule for parents is, "Get into Your Children's Classrooms." Parents become involved by talking with the teacher, the principal, and beyond. Suggested questions help parents evaluate what they see. At the end of this chapter, Smith masterfully refutes the objections of his critics. The book closes with a checklist for parents about their child, his or her classroom, the teacher, and the school.

Smith is dogmatic, but whether or not you agree with him, this book provokes thought on the approach to teaching used in our classrooms.

Reading: What can be measured? Second edition. By Roger Farr and Robert F. Carey. 1986. Newark, DE: International Reading Association. 218 pages. $14.25, $9.50 for members.

Reviewed by Glenn Blank

This book should be titled *What Cannot Be Measured*. The authors give a sobering survey of the factors complicating accurate assessment of reading, accenting what they consider current abuses of testing. Their purpose is to raise awareness of the limited value of test scores in ascertaining reading competence and to encourage more careful use of them. The first edition, published in 1969, reviewed research in reading measurement to that point. This edition updates the review to include current developments in reading theory, and bemoans that testing practices do not incorporate those findings. Throughout the monograph, the authors criticize the findings of the National Commission on Education's *A Nation at Risk*, which calls for more minimum competency testing because of declines in SAT scores. The authors see a rash of irresponsible testing and decision making based on uninformed use of test scores, accompanying the recent emphasis on a return to educational basics.

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Chapters include an outline of past and current test usages, and contrast them with findings of current research of the nature of reading. The authors raise a series of questions and present various positions on the issues. Each chapter ends with recommendations and an extensive bibliography. Chapter 1 traces the history of test usage over the past century and illustrates factors that induced increased reliance on standardized tests. The authors then present an overview of the validity problems in such testing. Chapters 2-4 examine in more detail the validity problems of tests purporting to measure comprehension, word recognition, vocabulary, study skills, and reading rate. Chapter 5 points out confusion among test producers in classifying tests, and compares validity problems across norm referenced, criterion referenced, and informal teacher originated tests. The chapter delineates additional factors affecting the reliability of tests, such as test length, manner of presenting instructions, the time of administration, and students' *test-wiseness*. Chapters 6-7 emphasize the degree to which policy makers rely on standardized tests for holding educators accountable, highlighting the political pressure for their use and pointing to indications that such use will increase in coming years.

The authors reiterate throughout the monograph the complexity of reading and the need for a holistic approach. They contend that reading cannot be directly measured. The heart of the validity questions is the problem of relating the specific behaviors a test measures to reading in real life. Even with tests that purport to measure comprehension, questions remain concerning how much the results rely on factors such as examinees' background knowledge or intelligence, and how these factors should relate to the definition of reading. In addition to being inadequate, standardized tests are expensive and are detrimental to the educational process by focusing attention on test performance.

The authors' recommendations center on the need to make more careful use of tests. Educators and policy makers should base decisions on a wide range of information sources, including informal testing, teacher-student interviews, and teachers' judgments. Decision makers should be aware of the limited value of standardized tests for evaluating schools' effectiveness and students' abilities. Less emphasis should be given to evaluating success or failure and more emphasis given to the value of tests as instruction activities. Educators must match carefully the testing instrument to the type of information sought, to their own philosophies of reading theory, and to actual

classroom objectives. Test producers should describe more explicitly the nature and purposes of their tests. The authors leave the details of application to the reader, assuming experience in education. They assume a familiarity with the content of various commercial tests and current reading theories making several passing references. They do not assume familiarity with the terms *validity* and *reliability*, giving elementary explanations of them.

The authors suggest as alternatives to standardized testing various informal channels for gathering information. They assume, however, the validity of these channels. They briefly acknowledge the need to check validity and call for more research of the results obtained from teacher made tests. Nevertheless, I wanted to see more discussion of how such informal channels relate to the validity issues raised for standardized tests. To refute the alarm raised in *A Nation at Risk* by pointing to increased graduation rates, for example, is at least as subject to suspicion as reliance on standardized test scores.

Educators, administrators, and policy makers need to be aware of the issues raised in this monograph, so they can use tests to the best advantage. The bibliographies and overviews introduce us to current research and make us aware of directions for research that wait to be explored. Since the authors deal primarily with standardized tests, the discussion is not immediately relevant to members of SIL and others engaged in vernacular literacy, but the issues underlying this discussion are important to teaching reading in any context.

National literacy campaigns: Historical and comparative perspectives. Edited by Robert Arnove and Harvey Graff. New York: Plenum Press. 1987. Pp. viii, 322. $49.50.

Reviewed by Rebecca Pruett

This book is a compilation of twelve essays by twelve authors who each deal with a historically significant large-scale literacy program of the last four hundred years. In the introductory chapter, Arnove and Graff identify the purpose of the book as illustrating,

> That major and largely successful campaigns to raise levels of literacy have taken place . . . from the time of the Protestant Reformations, and that they share common elements.

Of the twelve essays, five describe pre-twentieth century literacy campaigns in Germany, Scotland, Sweden, the United States and

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Russia. The other seven essays deal with twentieth century campaigns in China, Cuba, Tanzania, India, and Nicaragua, as well as the international efforts of UNESCO. The final essay is a broad, sweeping description and comparison of literacy programs in the United Kingdom, France, and the United States in this century.

The introduction draws generalizations about contexts, goals, patterns of mobilization, motivation, methods, and outcomes. Arnove and Graff identify major triggering events for each of the national literacy campaigns, such as a religious or political revolution that forced people to adapt to a new social order. Though the mobilization techniques, motivation, and methods associated with the various campaigns differed, the outcomes were similar. Major shared outcomes from these national literacy efforts were:

Institutionalization of school systems.
Standardization of national languages.
Incorporation of marginal populations into national societies.
Legitimization and consolidation of political regimes.
Resistance of individuals and groups to centralization by national authorities.

The individual essays stand on their own as historical descriptions, interpretations, and evaluations of significant national literacy campaigns. The authors take different approaches, most arguing for a reevaluation of the traditional or popular views of the campaigns.

The massive campaigns of previous centuries give valuable lessons to those of us involved in literacy today because all were shaped by the political, economic and social contexts of the time. The existence of the campaigns arose out of the political or religious authorities' perceived needs for social stability, with most societies needing a long-term transition from an oral to a written tradition. Generational divisions often accompanied the progress of literacy in many countries.

Most of this century's campaigns resulted from political and ideological revolutions that often accompanied societal reordering. Cuba and Nicaragua had a dramatically positive experience, accomplishing almost universal literacy. In Russia and China, however, revolution led to literacy campaigns, but it also led to suppression by the very structures the literacy advocates helped to create.

This book is worthwhile for the sake of the case studies. The history of these campaigns can teach us valuable lessons about what it takes to have a successful literacy movement on a local or national

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level. The authors explicitly state some of these lessons, yet many more are left unstated. The reader must invest personal work in integration to get the most out of the book.

American Sign Language: Linguistic and applied dimensions. 2nd, rev. ed. By Ronnie B. Wilbur. Boston: College Hill Press. 1987. Pp. 387. Paper $33.00.

Reviewed by Shelley Dufoe

American Sign Language: Linguistic and Applied Dimensions is a review of the linguistic research on American Sign Language (ASL) and an overview of the educational applications of various sign systems. The underlying theme is that the structure of signs is now viewed by linguists as *analyzable* rather than as "simultaneous bundles of parameters (handshapes, location, movements, etc.) which behave as an unanalyzable whole."

Dr. Ronnie Wilbur is Professor of Linguistics at Purdue University, and a prominent researcher and prolific author in the field of ASL linguistics. The book is a valuable source of information for educators of the deaf, for advanced ASL students, and especially for those wanting an introduction to sign language linguistics. Wilbur does a good job documenting the similarities and distinctions between manual/visual languages and oral/aural languages, making Chapters 1-6 an excellent resource for linguists interested in language universals. Additionally, several chapters contain large technical sections designated "Primarily for Linguists."

Chapter 1, the introduction, presents information about the origin and demographics of ASL, the existence of distinct sign languages in other countries, the influences of English upon ASL structure, "Signed English" (the use of ASL signs in English word order), the difficulties of representing or transcribing signs on a two-dimensional medium, and the problems of early sign language research (such as the study of non-native signers and the failure to note crucial information about sign formation and non-manual features).

Chapter 2 is a survey of basic features of signs and traditional approaches to sign phonology. Four major parameters of sign language are handshape, location, movement, and orientation of the palm. Other significant parameters are contact of the hand(s) with the body, the direction of the movement, the speed of signing, the

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tension in the signing hand(s), the size of the path of the sign, facial expression, eye gaze, and head movement.

Sign languages have physical, perceptual, and linguistic constraints on allowable signs that decrease complexity and aid in fluidity in signing; historical changes in signs are strong evidence for these constraints. Sign languages use non-manual signs (facial expressions and head movement) to express morphological, syntactic, and semantic functions. The "Primarily for Linguists" section discusses proposed distinctive features for ASL handshapes.

Chapter 3 surveys current approaches to sign phonology. Evidence of "timing, rhythm, and clustering of segments for perception and production" lends support for the presence of syllable structure in sign languages. The current approaches emphasize "the *sequential* nature of the arrangement of building blocks, slicing signs" into segments of movements (sign path and/or local) and holds. Every syllable in ASL contains one movement, so signs consisting of only a hold (unspecified for movement) combine with the transition movement prior to the sign to form a syllable. Signs with two different sequential movements are analyzed as disyllabic. Most ASL signs are monosyllabic.

Some signs, which are modifiable ("productive signs"), are analyzed as being underspecified for location, handshape, and/or direction of movement. Productive signs may undergo certain types of affixation without the addition of extra syllables. In some cases, affixation is optional and the sign may use the citation (default) form. In other cases, affixation is required.

Signs can be subdivided into phonological classes. For example, the handshapes of some signs are modified by the following sign; others are not. The rhythm of some signs can be modified; the rhythm of others cannot. For most signs containing an opening or closing movement, the second handshape is predictable from the first, and thus may be underspecified and filled in by a redundancy rule. The "Primarily for Linguists" section discusses proposed syllable structures, tiers and feature spreading, underlying representations and phonological rules, and the organization of the phonological component.

Chapter 4 explains ASL word formation. Word formation occurs when a productive (underspecified) sign such as a predicate root (movement specification) combines with a classifier (handshape specification) and/or is specified for argument agreement. Also, compounding and closely related noun and verb pairs are dealt with,

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as are groups of related word families such as families related by motion difference, handshape location, reduplication, or changes in movement, handshape, or location.

Chapter 5 explains inflectional processes of ASL. Nouns may be inflected for plural. Verbs may undergo multiple modifications to communicate additional information about the arguments and the manner of the verbal activity, including modifications "indicating number, distributional aspect, temporal aspect, temporal focus, manner, and degree." The modifications are represented by spatial locations, changes in direction, plane, or contour of movement, temporal rhythm, speed, size or tension.

Chapter 6 considers ASL syntax. The word order in ASL is relatively free because of "the extensive system of inflections, verb agreement, classifiers, and non-manual signals," but some word order constraints do exist, especially when the verb is not inflected and the arguments are semantically reversible. Linguists do not agree on the basic word order of ASL, although many claim that the general underlying order is SVO.

Chapter 7, "Psycholinguistics and Neurolinguistics of Sign Usage," examines iconicity and metaphor in sign languages, aspects of sign production, perception, and memory.

Chapter 8 discusses acquisition of sign language (phonological, morphological and syntactic aspects) and fingerspelling by deaf children.

Chapter 9, "Sociolinguistic Aspects of Sign Language and Deaf Culture," presents information on the origin of ASL, dialectical variation within ASL, Pidgin Sign English (a signing variety which has features of both ASL and Signed English), the deaf community, and the interaction of deaf and hearing people.

Chapter 10, "Sign Systems Used in Educational Settings," describes the various sign systems, including Signing Exact English, Manual English, and Signed English. Also included are fingerspelling (a manual representation of written English) and cued speech (a system of supplementary hand cues to aid speechreading that encodes the movement of mouth organs that cannot be observed).

Chapter 11 discusses the positive influence of the early use of sign language with deaf children on their language development (including the acquisition of English), reading and writing, and social and

emotional development. Manual communication does not appear to affect the development of oral skills (speech and speechreading).

All considered, *American Sign Language: Linguistic and Applied Dimensions* is an excellent review of the research on sign language and its educational applications. It is a resource well worth reading.

Writing as social action. By Marilyn M. Cooper and Michael Holtzman. 1989. Portsmouth, NH: Boynton/Cook Publishers. $18.50.

Reviewed by Tom Walsh

Marilyn Cooper and Michael Holtzman's work in defining writing as a social action is a challenge to the system of writing and literacy teaching that is now in vogue in the U.S. and around the world. Their assessment of the problem and agenda for the cure are presented in 15 essays.

Chapters 1 and 2 present the authors' views of some current models, i.e., the cognitive process model and their post-Freirian model of literacy. Chapter 3 chronicles Cooper's one year of teaching first-year college composition using an interactive model, while chapters 4-6 critique methods of evaluation and assessment of adult literacy programs. Chapters 7-9 discuss communicative properties of writing and the difficulties of learning conventions of genre types. In chapter 10, the author's concern is that differences in the ways women think should motivate different strategies for teaching them. Chapter 14 presents the authors' world view regarding the whole of *us* as individuals functioning in the corporate discourse community and our responsibilities as member writers.

Some of the authors' views provoke the reader's interest more than others. For example, Cooper and Holtzman believe that writing must be viewed as a *social action* because "writing is located in the social world and, thus, is fundamentally structured by the shape of that environment" (p. x). Writing as an activity taking place in this social environment is an *ecological* writing system that provides context for the dynamics of interaction, the "activity through which we become most truly human" (p. 13).

The post-Feirian model of education that encompasses the intimacy of the "each one teach one" Laubach method with the activistic Feirian method frees "the poor who are habituated to dependence on

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the rich for their access to knowledge and further education" (p. 19). This model embraces the *new consensus* of many educators who believe that decisions concerning educational need should be decided by those in need and not by outsiders. Those who promote this view prefer self-instruction by small groups of people voluntarily assembled, assisted by outside organizations only as necessary. The goal is self-reliance and improved living conditions through the efforts of the people themselves. This is the "only education practical for the most oppressed" (p. 26).

Cooper's experiences as a teacher of college English composition is an example of her approach. She has reservations about the utility of the *process-centered* approach to writing that is starting to replace the *product-centered* model. This paradigm shift is a reaction to the cumbersome concentration on teaching form over content writing. Cooper prefers the interaction of ideas through various kinds of free writing, allowing students the freedom to decide what is important to write about. Each student has the primary responsibility for the purpose of each writing's content.

The authors see major flaws in older models, with their notion of the *ideal writer* isolated from the real social world. Assignments intended to produce predictable grammatical forms and sentence and clause types should be replaced by writing that emerges from the daily real-life situations in the student's social context. Cooper challenged students with readings by writers like Herbert Marcuse so students would express their thoughts and feeling through journal entries, thereby acquiring a higher *social consciousness*.

Cooper's vision of the ideal *discourse community* is one "in which people come together in discourse and negotiate what they want to do and what matters to them . . . concern about each of its members . . . goal, . . . needs, and what they have to offer" and not one where everyone inside is all alike and significantly different from those who are outside . . . regulating who has access to resources, power, even to discourse itself . . . " by creating "gatekeepers to make sure that the right people get in and all others are excluded" (p. 204-205).

Cooper and Holtzman display an apparent compassion for their *ideal writer*, who is frustrated, rejected, and disenfranchised by the elite. I see their model as prejudiced by their frustration with current instructional practices. Unfortunately, the authors' political and social philosophy may affect acceptance or rejection of the model more than the validity of the model based on its merits alone.

Language learning practices with deaf children. By Patricia L. McAnally, Susan Rose, and Stephen P. Quigley. Boston: College-Hill Press. 1987. Pp. 250. Paper $31.00.

Reviewed by Karla Faurot

The book *Language Learning Practices with Deaf Children* is interesting, practical, informative, and readable. It deals primarily with the difficult challenge of teaching deaf children to read English. It also deals with the development of oral or signed language.

The target audience for this book is teachers of the deaf. Its purpose is to familiarize teachers with the major issues and instructional practices for teaching language to children who became deaf before age 2. For these children, the major channel for receiving communication is vision, so they acquire language visually.

Chapter 1 describes theories about the stages of language development in children with normal hearing. Chapter 2 compares and contrasts language development in hearing children with language development in deaf children. Overall, deaf children's language development follows essentially the same pattern as that of hearing children, but at a considerably slower rate. One likely reason for this delay is that they have much less language input than the typical hearing child.

Chapter 3 briefly describes the history of education for the deaf from the 1500s to the present, focusing on methods for teaching language and reading. Throughout this history, we see two main approaches recurring: the natural language (holistic) approach, and the structural (analytic) approach. Currently, both approaches are being used. Many educators claim to use the natural approach, but in actual practice they use a combination of the two. Others claim that some things must be taught explicitly because the natural approach does not give children enough exposure to certain structures for them to learn them naturally. Another approach gaining interest and support is to teach American Sign Language (ASL) as the first language and then teach English as a second language (ESL approach). Chapters 4, 5, and 6 elaborate on these approaches.

Chapter 4 discusses the natural approach. The teacher uses the natural approach to structure the deaf children's language situation in such a way that they learn language in the same way as hearing children do. The four underlying principles of the natural approach are: (1) language involves interactions among the components of

content, form, and use, (2) information about normal language development is the basis for determining language goals and intervention strategies, (3) language is learned though communication, and (4) communicative competence is the ultimate goal of language development. This chapter discusses what each of these principles means, and gives practical examples of how to put them into practice. It includes a number of specific instructional activities for teaching natural language at various age levels.

Chapter 5 focuses on structured and combined approaches. These approaches are based on the assumptions that deaf children can learn the structure of language through imitation of models, and that structured and repeated exposure to specific, target language structures will speed up their acquisition of those structures, and that the uses of metalinguistic symbols are useful in reinforcing correct English form. Three of the most commonly used curricula are discussed in detail, while several other curricula and language materials for the deaf are discussed more briefly.

Chapter 6 deals with the idea that deaf children should be taught American Sign Language (ASL) first, and English later as a second language. This idea is supported mostly by the negative data that the overwhelming majority of deaf students do not learn to read and write adequately using current methods. Supporters disagree as to how to best carry out this method. Bilingual schools are envisioned where the teachers are fluent in ASL, teaching content areas in ASL in the early years, with English taught explicitly, and only later use English for teaching content areas. Ideally, the children would also be consistently exposed to ASL at home. One obvious problem with this idea is that most deaf children have hearing parents who are not fluent in ASL. Also, few teachers are fluent in ASL. For hearing teachers and parents, becoming fluent in ASL is quite difficult, while becoming somewhat proficient in a form of signed English is much easier and therefore more attractive. Signed English is used in the highly popular "total communication" programs. Though the idea of using ASL to teach English is becoming popular, it is not likely to become common in the near future, though small scale experiments and model classrooms are beginning to appear.

Chapter 7 deals with some more complex topics, such as figurative language, inferencing skills, and writing, giving some practical ideas for teaching these.

Chapter 8 is a brief synthesis of the whole book. It discusses the three major approaches to educating deaf children: oral-aural, manual, and the combination of these, often referred to as "total communication." About 30% of deaf children in the U.S. are in oral-aural programs that focus on teaching the child to speak and lip-read and use any residual hearing they may have. The manual, or ASL/ESL approach, as stated above is a new idea that has not had much testing and is not in widespread use. Total communication programs, which use some form of signed English, are the most common, with about 70% of deaf children enrolled in such programs. The most interesting point it brings up is the idea that the eye is an inefficient processor of spoken languages, especially of those structures that depend heavily on suprasegmentals, and that deaf children seem unable to extract the structure of English from purely visual presentations of it. Signed English is unable to represent suprasegmentals of English, while ASL has ways to represent its own suprasegmentals. Though most deaf children in the U.S. are being exposed to English for years, both written and signed, they seem unable to extract and internalize the structure and produce grammatical English. The eye is better adapted to processing the spatial and motion features basic to ASL. This leads to the conclusion that the currently popular idea of using signed English to teach deaf children English is fundamentally flawed and will not work. Rather it leads us to support the ASL/ESL approach or the oral/aural approach. It seems likely, however, that total communication will continue to be the prevailing educational philosophy for some time to come.

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NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236
U.S.A.

Note for contributors: Readers are invited to submit letters of comment and publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 West Camp Wisdom Road, Dallas, Texas 75236.

Computer media: Contributors are encouraged to submit copies of their manuscripts on computer media (MS-DOS or MAC format) along with a paper copy of the manuscript.

ISSN 0737-6707

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LITERATURE DISTRIBUTION: THE BASICS

Ralph H. Toliver

Ralph Toliver received a Ph.D. in mathematics from The University of Michigan in 1975 and joined SIL in 1976. He is currently a translator for the Ambo-Pasco dialect of Quechua, which is spoken in the central Andes of Peru. This paper is the result of a long-time interest in community development and in the promotion and distribution of vernacular literature.

1. INTRODUCTION

I spent a fair amount of time and effort on putting together a workable, fair way to price and distribute vernacular literature. My focus was books in Quechua or about Quechua. I have aimed to establish (1) ongoingness, (2) a distribution network, (3) profit, and (4) a cohesive pricing system with a high enough price for sellers, low enough price for buyers, and easy pricing of books.

Some of these principles, such as ongoingness, are principles we all share. Others have been hammered out on the anvil of experience. I want to point out that I intend these principles to be descriptive, not proscriptive. They have worked for me. But if they don't work for you, don't use them.

2. ONGOINGNESS

We want literature production, distribution, and use to continue after we have gone. This includes the sale and use of the translated Scriptures. If we fail in ongoingness, all our work will have been in vain.

Many of the other principles are a natural outworking of ongoingness. A distribution network helps literature continue to get out when we are gone. A pricing structure that keeps prices down and yet allows intermediaries to make a profit makes the system self-motivating and not dependent on, say, our paying people a salary to sell books.

One thing we want to avoid is making our efforts hard to follow. Others cannot put the same time or finances into a project that we can. So, we aim for a pricing and distribution system that is economically viable. Then the time and finances contributed by outside parties is minimized.

A subtle aspect of ongoingness is the need to avoid too much quality. The four-color illustrated books put out by other literacy projects are beautiful, but most people do not have the expertise or money to make them themselves. The production of these books will halt when the project financiers leave. For this reason, we have deliberately kept down the technical quality of the books we have printed. Our first materials were mimeographed on newsprint quality paper, often without any special cover. Outside of Scriptures and technical material such as dictionaries, current materials are produced on bond with card stock covers. We do not wish to get fancier because we do not want to be a hard act to follow.

3. DISTRIBUTION NETWORK

A distribution network is essentially a system of vendors or sellers. I provide literature in bulk to people who in turn provide the literature to the individuals who will use it. We must have a distribution system. Fifty linguists would like to make a significant impact on several million Quechua speakers. Fifty to two million is a ratio of 1:400,000. We cannot do the job alone.

The main advantages of a distribution network are (1) it multiplies our efforts, (2) it reaches areas where we have not gone or cannot go, and (3) it allows us to sell larger quantities and a broader spectrum of literature.

Sellers will be the key to a successful book promotion program and distribution system. One seller can sell much larger quantities of books than I can, and if I am supplying two, three, or more sellers, my efforts are greatly multiplied. For example, in the month of July 1988, I sold approximately $4.25 worth of books over a three-week period. I go out almost every day to practice Quechua, and I always go out with a stack of books, show them to people, read them to people, and in other ways promote them. So I have constantly been exposing books to potential buyers. On the other hand, in July I also visited one seller in Cerro de Pasco. I received $11.50 from books I had left him on consignment, and received an order for $51.50 worth of tapes and books (he will pay cash for his order). This man is a traveling salesman of kitchen pots and gets to outlying communities. There are three sellers whom I regularly supply with materials, and several others whom I supply every now and again. So my efforts in book promotion are multiplied through sellers and their impact in book

sales is greater than my own. In 1991, approximately 85% of the books I sold were through vendors.

Bookstores are particularly valuable here. They can give us a big market, especially for our bigger, more expensive books. In the same time period (July 1988), I received a request from a Cerro de Pasco book store for 50 copies of the Ambo-Pasco *Useful Words* book. This kind of volume on the more expensive books is difficult to match by sales to individuals or even to sellers.

Further, sellers will get to places I never will. One pastor has come to my door in Huanuco twice to buy books and tapes in quantity. He works in Monzón, an area I cannot go to. A seller in Cerro de Pasco goes to all four presbytery conventions of the largest Evangelical denomination in Pasco and Junín and sells Quechua materials in each one. I normally get to attend only one of these conventions.

These examples show that the sellers are already having an impact on the distribution of Quechua literature, both in terms of quantity and in terms of distribution through a wide area.

4. PROFIT

We need a motive that will encourage sellers (vendors) to make a distribution system work. Being able to earn part of your living through selling books and other literature is a significant motive.

In the system currently being used in Huanuco, the vendor receives books in bulk for 75% of the price he will sell them for. In Peru, vendors do not mark up from a wholesale price to get the retail price. Rather, the retail price is fixed and the wholesale price is viewed as a discount from the retail price. So instead of talking about a markup of 33% from the wholesale price, we talk to vendors about a discount of 25% from the retail price. In this way, we fit into the national culture. Further, we have tried to make the discounts comparable to the national norm. In 1988, the norm was 30% for vendors and 40% for bookstores. Our discount of 25% is slightly lower, to give the retail buyer a better price, and also because few of our vendors depend for their full livelihood on selling our books.

I have had most success when (1) the business of selling literature is an *add-on* to the vendor's ordinary routine or (2) the person is already interacting with the market for our books. One vendor mentioned in the last section is already a traveling salesman. The pastor is already going to church conventions. A church convention is

a high concentration of people who want Scriptures, chorus books, and tapes. These people bring money to the conventions to buy any materials available there. The book store is already a big provider of textbooks to university students, and many are required to take a course in Quechua, so they are primed to buy Quechua materials.

5. COHESIVE PRICING SYSTEM

The two major factors of a cohesive price system:

1. Setting a price high enough for vendors but low enough for buyers.
2. Having a method of pricing books that is easy to manage.

The pricing of books is a task that will require much effort and one in which people will have a wide range of opinions. We still do not agree at all points here in Huanuco.

First, we set a price for almost all our materials. An exception has been the cholera pamphlet, which was distributed for free. People value materials more when they have paid for them. Further, ongoingness demands that we set a pattern that is economically realistic so it is possible for others to make a living by making literature. So we attempt to set a price high enough to yield a profit for sellers, yet at the same time is low enough to offer a modest price for the Quechua speakers we are ultimately trying to reach.

It is critical to have a method of pricing books that is easy to manage. A clumsy system will waste time, and opportunities will be lost if the difficulty of deciding on the price of a book causes us to say, "I just can't give you the price of that book right now." A system that does not yield a uniform price for a book can lead to misunderstandings between team members, or suspicions of bad faith on the part of the buyers. SIL colleague Mark Bean expressed this concern when he said that we need "a system whereby, under the changing economic conditions, any person can easily calculate the cost of books any time and anywhere."

Such a system needs to clearly determine:

1. A book's base cost that remains fixed through time.
2. A factor for calculating the current cost of the book (e.g., in the local currency).
3. Factors for calculating the cost of the book to vendors and to the public.

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Our base price for most materials is the actual production cost minus a subsidy. The resulting value is *cost*. Most materials have no subsidy. Translated Scriptures are heavily subsidized, first because we want to make sure that practically everyone can purchase Scriptures, and second because they have already been paid for by The Bible League. The *cost* is the price at which we sell to vendors. There is a standard mark-up from the *cost* to the retail price, and this is the profit for the vendor.

Mark Bean has worked with a two-tiered pricing system, one for the rural areas and another for the city. The rural area prices are lower because the people there have less money. The principles are the same; the rural area prices may use larger subsidies or smaller mark-ups. Where I work, people have more ready cash (in part because many work in the mines), so I have used one price for both city and country. If I sold books personally for a lower price in the country, I would prefer to express the lower price as a sale price. Especially in the context of selling at a church convention, this would be a reasonable alternative.

It is clear that we are already a hard act to follow. First, we have not included at all payment to the authors of new literature, either money to live on while creating new material, or even royalties for the material sold. Second, we have bowed to the reality of subsidies. SIL colleague Elizabeth Wyss has told us that a very successful producer of vernacular literature in Bolivia can exist only because of the subsidies provided by mission groups.

How do you keep a reasonable value for books in an environment of rapid inflation, such as Peru was experiencing in 1988? We calculated the net cost in dollars and then computed wholesale and retail prices in the local currency by multiplying by the exchange rate. This straight-forward strategy can serve admirably and does give a very good first approximation of fair prices. There are two cases in which other strategies are helpful.

First, in 1987-88 the dollar was growing in strength against the Peruvian Inti, even when the exchange rate was taken into account. This is, the dollar value of goods (e.g., paper, ink, masters) was decreasing through time. The result was that the dollar cost of producing earlier books was greater than the dollar cost of producing later books. The effect was that the earlier books were slowly being priced out of the market. A solution (which we never actively put into practice) was to re-evaluate the *production cost* of earlier books by

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changing the cost to the production cost of an equivalent recently printed book.

Second, inflation in the city can be different from prices in the country. In a village rather isolated from the national scene, where the cost of living may be stable during a certain period, people may resent paying an escalating price for books simply because the national currency is being devalued. In this case, colleagues suggested two expressions of the same principle:

Peg to the Egg	(David Coombs)
Match the Match	(Bruce Benson)

The idea behind both is that the value of books can be fixed to the value of local products. If you will be in the village for the season, calculate how many eggs a book is worth, and use this value for the entire season, regardless of how the national currency performs.

Finally, there is the special case of fixing prices for music tapes and for Spanish Bibles. In the case of vernacular books, we can set prices according to our desires because even in the general market, books of roughly the same size will vary in price according to quality, demand, captive markets (e.g., school books), etc. But in the case of music tapes and Spanish Bibles, we are constrained by the wider market. The price of music tapes is fairly standard, and exactly the same editions of Spanish Bibles are sold in the local Christian bookstore.

6. HOW TO BEGIN DISTRIBUTION

Basic principles of distribution are:

1. Scratch where potential readers itch.
2. Keep it short.
3. Start with books from other related dialects and have a variety of stock.
4. Be a book person.
5. Be a Bible person.

A basic rule of community development is: "Scratch where they itch; later they will itch where you want to scratch." So start with books and other materials which meet their felt needs.

Christians:	chorus books (not, in fact, Scriptures)
Ordinary villagers:	alphabet books, riddle books
University students:	dictionaries, grammars

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Note that we need different materials for different audiences. It is valuable to have and to show other kinds of books to the different audiences, but do not expect big sales at first in health books or large Scripture books.

Quechua people are not used to reading. Keep it short—both the book as a whole, and the basic units of the book.

Type of book	Basic unit
alphabet book	1 word
riddle book	2-4 lines
small folktale	2-4 small pages
small collection	20 pages, with illustrations of folktales

It seems more trouble to make an individual book for each folktale, but more people will buy a small one. A 30-page book, even when broken up with pictures, is imposing for most of our readers.

If you do not yet have books in print, it may be practicable to sell books produced in one or more neighboring dialects. This should be done only in the initial stages, lest speakers of the local dialect get the idea that books can be written only in a neighboring dialect.

Further, keep a variety of books for a variety of audiences. I have a cardboard box already packed with chorus books and tapes (for Christians), alphabet books and folktales (for other villagers), dictionaries and grammars (for professional people and students). I show all the kinds of materials to all the audiences. Sometimes I am surprised what people buy. Also, it shows the ordinary villager a wider world that he might participate in at a later time.

My cardboard box comes provided with a price list and a block of sales receipts. If I go on a trip, I just need to pick it up, and my literature promotion and distribution is ready to go. If I'm in the village, I just need to make a quick selection, and I have books to take with me while I walk about the village.

Be a book person—carry some with you always

Be a Bible person—have some available in the language of wider communication and in a variety of readable dialects.

7. SPECIFIC PROBLEMS

7.1. Consignment sales

This has been an easy way to jump-start a distribution system. Simply give books and materials to a person, with the understanding

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that they need to return to you the wholesale value of the books. I had good success with this for a number of years. The sellers would faithfully return to me the wholesale value and order more books, again, on consignment. The major problem I had was that in 1987-88 the Inti was in hyper-inflation. If I did not get back to the vendor for several months, a significant fraction of the value of the books sold was eaten up by inflation. More recently, several vendors have failed to return with the wholesale value of the books. Instead, I feel that some have used the capital for their daily needs. When this happens, they are embarrassed to return, and the account continues without being paid off.

More recently, I have gone to a cash basis. In part because of this, in part because of the economic hardship, in part because I have spent less time with church leaders and villagers, I sold virtually no books last year.

In moving to selling on a cash basis, I have compensated by offering to buy back any stock that a vendor cannot sell, as long as it is still in good condition. This encourages vendors to take more materials, since they do not run as great a risk of being stuck with unsold stock. (Unfortunately, this again contributes to our being a hard act to follow.)

7.2. Control of retail prices charged by vendors

I give the vendors a list of the latest prices, both retail and wholesale. Most have followed my guidelines, and so I feel I have been giving a fair price to the public. However, some of the vendors have taken advantage of the low supply and high demand to charge what the market will bear. At the moment of the sale, I have no control over the price asked. However, there are several remedies:

1. As much as possible, pick reputable vendors (this includes being discriminating among Christians). There is no value in getting books out, if the exorbitant prices charged bring a bad name on Christians in general or us in particular (the buying public knows we are the ones providing the books).
2. Get more than one seller in an area so the competition keeps the price down.
3. Disseminate the prices so the public is aware of the true current prices.

The most effective means is to choose reputable vendors. In all this, I will say that the most honorable vendors have been the

professionals, that is, the two well-established non-religious bookstores for whom I have supplied books.

There have been times, especially in the case of expensive music tapes, when I have suggested to vendors that they could sell materials under the stated retail price. This would cut down on their profit per item, but would probably be compensated by an increase in sales.

7.3. Pricing of music tapes

The prices of music tapes are controlled more by general market forces than are books, so there are special problems in this area.

I sell the tapes of a Quechua gospel ensemble. We have agreed to sell tapes for the same retail price. This way, I am not underselling them (which I could, since I do not need the profit). Also, I am not overselling them, leading to the loss of sales for me.

We also sell tapes to the local Christian bookstore. It has a standard price for Spanish music tapes and a standard (but lower) price for Quechua music tapes. We need to adjust our wholesale and retail price of chorus book tapes to conform to this reality. If we sell in other places for lower or higher than their price, people will complain that one or the other of us is unfair. The standardized retail price also influences the wholesale price paid by the bookstore. In 1987-88, we had a stock of tapes which had been purchased at a very good price. We wanted to pass these prices on to the folks in the rural area. But we also sold the tapes at the same price to the bookstore, who then marked the price up over 100% (suggested markup was 33%) to match the retail price of their other Quechua tapes. In effect, we were subsidizing the bookstore. We probably could have passed on the good price to people buying tapes sold in the rural area and simply raised our wholesale price for the bookstore so they could have a fair, yet not excessive, markup.

We ran into a special problem during this same time period. Our wholesale price for music tapes was actually below the cost of blank tapes. Several times, a member of a local Spanish ensemble came to our door and requested large volumes (hundreds) of our tapes. We stopped selling when we realized that he might be throwing away the chorus books, erasing the tapes, and using them as blank tapes for his group. So, for reusable media such as tapes, the media must be priced above the price of blank media. Or, if you want to pass a good price on to legitimate buyers, such abuses need to be recognized and guarded against.

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WHAT'S LITERACY FOR? A REVIEW OF FOUR PERSPECTIVES

M. Paul Lewis

M. Paul Lewis has worked with SIL since 1982 in Guatemala. He directed a study in the sociology of language of K'iche' from 1986 to 1988 and has also worked in language data processing and technical studies. He has an M.A. in Linguistics from the University of Texas at Arlington and is currently a candidate for the Ph.D. in Linguistics at Georgetown University, Washington, D. C. His research interests are in language use, language maintenance and shift, the sociology of language, language education, and contrastive rhetoric.

1. INTRODUCTION

Four articles represent four different approaches in which literacy is used. Shirley Brice Heath's *The Functions and Uses of Literacy* and Victor Greaney and Susan Neuman's *The Functions of Reading: A Cross-Cultural Perspective* provide a cross-cultural perspective. The other two, Larry Mikulecky's *Job Literacy: The Relationship Between School Preparation and Workplace Actuality* and Victor Nell's *The Psychology of Reading for Pleasure: Needs and Gratifications* examine specific uses given to reading in predominantly Western settings (the United States and South Africa). Greaney and Neuman, Mikulecky, and Nell's reports are quantitatively oriented studies, while Heath's is based on a study in ethnography of communication. A unifying theme in the four articles, besides the focus on functional aspects of literacy, is the mismatch between how literacy is taught in formal educational settings and how literacy is actually used.

2. ARTICLE SUMMARIES

Heath's article provides an overall framework for understanding the notion of literacy use as a domain of investigation. She points out that one difficulty in this study is that literacy itself is subject to multiple definitions, each of which has an implicit understanding of the functions of literacy. Thus, what one presupposes a literate person ought to be able to do with literacy shapes one's definition of what literacy is. Historically, the uses of reading and writing have been relatively circumscribed and limited to an elite group of specialists. With the invention of the printing press, however, literacy became

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available to the masses and gained the potential for widespread functional distribution as well.

The correlation between literacy and social status, which is prevalent in modernized societies, is an innovation that accompanied increased access to literacy. Industrialization brings with it demands for reading skills, and over time the demands of the marketplace have shaped the content of educational curricula so that what is considered by educators to be literate behavior has been shaped more and more by occupational needs and demands. This functional orientation has also insured the continued use of literacy.

There are economic and social rewards associated with literacy. Heath mentions examples of societies who briefly adopted literacy when introduced to it by outsiders, but quickly abandoned it when there was no meaningful change in their economic situation. This demonstrates that the presumed causative relationship between the adoption of literacy and subsequent improvement of economic status is not a universal. In fact, it seems more likely that it is the potential for improved economic or social status which spurs literacy, rather than vice versa.

Heath uses her ethnographic data on a rural Black community to demonstrate how the actual uses of reading and writing in that community differ markedly from the uses that are assumed by school instruction. Actual uses are categorized under seven headings: instrumental, social-interactional, news-related, memory-supportive, substitutes for oral messages, provision of a permanent record, and confirmation. She notes that these do not include the functions usually assumed by school instruction: critical, aesthetic, organizational and recreational functions. In the community she studied, the scope, content, and methods of acquisition of literacy all differed markedly from the norms assumed by the school. These facts have important implications for educators.

A more quantitative orientation to the differences and similarities between different societies in regards to their understanding of the uses and functions of literacy is provided by Greaney and Neuman. Their article examines the functions of reading reported by students at three different age levels in two separate studies in 13 and 15 countries respectively. The results of this study showed that 10- and 13-year-olds from a very diverse group of countries share to a very great extent the same perspectives on what literacy is for: utility, enjoyment and escape.

The study by Mikulecky is a quantitative examination of the actual uses of literacy (demands, competencies, and strategies) in the workplace and in various school settings. The goal of the study was to determine if what is being taught in school matches the demands of the workplace. The study divided the sample among technical school students, high school students, and college students and among blue collar workers, middle level (e.g. clerical, retail, service) workers, and professionals. It was assumed that there would be a convergence of the reading demands, strategies, and competencies of each group at each level. Thus, technical school students were hypothesized to converge with blue collar workers, high school students with middle level workers, and college students with professionals. The study examined the correlation between technical school students and blue collar workers and between high school students and middle level workers. In addition the study compared professionals with all other workers (but not with college students, as might have been expected).

The findings indicate that, in fact, the assumed convergence between school literacy and workplace literacy is not very strong. Overall, students are required to read less in school than workers are required to read in the workplace and the students read less competently. The statistical analysis of the data indicates that these differences between students and workers are significant. The analysis of the data also indicated that students and workers differed not only in the amount of reading they did but also in the strategies they used in comprehending material and in the purposes for which they read. As might be expected, the study also found that professionals read a wider variety of materials, read more competently, and used more effective strategies in their reading than did all the other workers.

The final set of studies considered here examines reading for pleasure (ludic reading) and discovers a number of differences between ludic reading and reading for other purposes. Nell notes that one of the motivations for this study is the goal of educators to bring students to the place where they will spontaneously engage in ludic reading. This presupposes that ludic reading is a result of the achievement of a certain level of reading skill. Nell attempts to determine what the components of that reading level are. Nell conducted his research over a 6-year period and used five different research probes aimed at investigating various aspects of reading for pleasure. Each of the five sub-studies looked at a specific aspect of ludic reading and ludic readers, including reading habits, reading

speed, variation in reading speed, reader rankings of books (based on preference, merit, difficulty), physiological changes during ludic reading, and, what Nell calls the "sovereignty of the reading experience," which looks at the cognitive changes in consciousness that take place during the reading process.

As might be expected, the interrelation between all of the various factors is quite complex. In very brief summary, however, Nell found that each of his studies identified one aspect of the pleasure found in reading by his subjects. The gratification derived from reading can be attributed to (1) a high level of automaticity in extracting meaning from the text (good readers read for pleasure more than poor readers), (2) flexible control of the reading pace (most pleasurable passages are read more slowly), (3) an interaction of both text difficulty and societal attitudes towards reading for pleasure, (4) physiological stimulation derived from the reading of the most pleasurable passages, and (5) cognitive changes in the ludic reader that allows the exercise of almost complete control over their own consciousness ("reading trance").

3. DISCUSSION

While it is generally agreed that literacy is a "good thing" and that it brings benefits to preliterate peoples, it is less obvious that, like any other social innovation, literacy must be accepted and used. Literacy workers who have confronted the problem of literacy introduction, and later, the problem of literacy retention, have come to realize that the benefits of literacy must be perceived in terms of specific functions and uses to which reading and writing skills will be put.

Heath points out that the perceived benefits and functions of literacy differ from society to society. We should not presume that because Western society has found literacy to be useful for certain functions, that other societies will share that perspective. This applies equally to societies in which literacy is a recent innovation as well as to societies with a centuries-old tradition of literacy. These differences in perspective affect several aspects of literacy function and use: (1) the scope of literacy (who needs to or ought to be literate); (2) the content and context of literacy (what needs to or ought to be written or read); and (3) the mode of literacy acquisition. Western societies have generally presupposed that literacy ought to be universal in scope as well as in content (anything you can talk about you can write about) and that formal school settings are the most appropriate loci

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for literacy instruction. Heath's article raises important questions about these assumptions.

The article by Greaney and Neuman adds to the discussion by presenting quantitative data that demonstrates that there is considerable agreement across a variety of cultural settings as to "what reading is for." While at first glance this may seem to contradict Heath's assertions, examined more closely, it demonstrates how increased exposure to education and the values inculcated by educators and the education process brings increased self-reported conformity to the positive evaluation of the uses and functions that educators promote in their instruction, in spite of the cultural diversity of the subjects. An observational study of actual uses of literacy might demonstrate that the self-report data does not represent the complete picture. Mikulecky's article demonstrates even further how the goals and methods of the educational system are not actually equipping students with the kinds of skills they will need in the workplace. Not only do students do less reading than workers, but they are also not given practice in using the reading and comprehension strategies that workers are required to master. Here observational data were used to corroborate the self-report data and thus provide a more adequate perspective on not only reading behavior but also on attitudes toward reading.

Nell recognizes the strong role of societal values in determining the functions that will be assigned to reading and examines how a putative Protestant ethic ("the worst tasting medicine is the best for you") affects readers' choice of reading material. A similar type of study would be valuable if given a cross-cultural perspective and dedicated to the examination of the interactions of societal values, genre, and writing style. It might be found that in some (even more "Protestant") cultures ludic reading would not be seen as being a valid activity at all. Indeed, in most peasant societies where subsistence is an all encompassing goal, ludic reading would most likely be seen as an unconscionable luxury. In such a setting, education that has ludic reading as one of its goals would be seriously misdirected.

In summary, Heath's caveats are important reminders as we look at the functions and uses of literacy. Observation of actual reading behavior is important if we are to have an accurate understanding of how any society evaluates literacy. Educational goals tend to be over-generalized and idealistic norms that may not match well with the actual uses and functions given to reading. What are needed are

culture-specific studies that show what the appropriate scope, content, and methods of reading instruction ought to be. Only then will reading instruction more closely match appropriate reading use.

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THE DILEMMA OF BILITERACY IN PERUVIAN AMAZONIA

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1. INTRODUCTION

The Peruvian Amazon jungle, with an area of some 492,000 square miles, contains less than three hundred thousand people separated from each other by immense stretches of dense forest and meandering rivers. Such isolation has allowed the development of over 60 distinct languages and cultures in the Peruvian rain forest; isolation has also been a primary factor in the survival of the approximately 30 ethnolinguistic groups that remain there today.

These remaining groups have not gone unchanged, however. Outside contact has been established with all but one or two of the Indian groups of the Peruvian jungle; government-mandated education, the entry of missionaries, and profit-minded entrepreneurs have all left their mark on present-day Indian cultures. Response to outside influence has varied from group to group; some appear to have firmly established their cultural and linguistic identity, while others are near total assimilation to the national language and culture. It also appears that not all outside contact has been deleterious to the indigenous languages and cultures. At least one thing brought in by outsiders has proven to actually increase the Indian cultures' chances of survival amid the tide of assimilationist influence: the establishment of education in the mother tongue for every group that wants it.

Mother tongue education—and specifically, mother tongue literacy education—has been offered among Peruvian jungle groups since at least 1945, when members of the Summer Institute of Linguistics (SIL) began working in Indian communities there. As soon as SIL field linguists had developed an orthographic representation of the language, interested adults of the communities were encouraged to learn how to decipher and use their language in written form as well as spoken. Vernacular literacy has been promoted among at least 30 Amazonian language groups since 1945. Large percentages (over 50%) of the adults in a number of groups have at one time learned to read in their mother tongue through vernacular reading classes.

Bilingual education for children has also had significant impact on vernacular literacy acquisition; the government-sponsored bilingual education program has grown to include about 27 language groups and several hundred community schools.

However, as bilingual education has become more firmly established among Indian communities, there is also increasing expectation by the national government (and by some of the communities as well) that the program should be producing truly bilingual students whose skills in Spanish are on par with their language skills in the vernacular. Such an emphasis brings up the questions of how fluency in speaking Spanish affects maintenance of the vernacular language and culture, and as a further step whether stable biliteracy is feasible for these people.

For the Peruvian jungle Indian, the problem is two-faceted. First, literateness in a low-prestige minority language is tenuous by nature; it is subject to certain sociolinguistic conditions. Even where initial acceptance of vernacular literacy is strong, this position may falter before the encroachment of national language and culture. Second, national language literacy and vernacular literacy are very different in what they require of the indigenous Peruvian—linguistically, socially, and cognitively. It is the purpose of this paper to explore these two facets of the question of biliteracy for the Indians of the Peruvian Amazon.

2. VERNACULAR LITERACY ACQUISITION

Spolsky et al (1983) and Heubner (1987) postulate several conditions for successful acquisition of vernacular literacy by a preliterate ethnolinguistic group. Three of these conditions pertain to the attitude of the receptor group: (1) that the group, or at least traditionally influential members of the group, perceive some utility in vernacular literacy; (2) that native functions be established for vernacular literacy; and (3) that use of the spoken vernacular continues to be widespread. The other two conditions Spolsky proposes are dependent on forces outside the group or community: (4) willingness on the part of those introducing literacy to support vernacular literacy (as opposed to promoting literacy in the language of wider communication) and (5) support of vernacular literacy by a strong educational system that contains some element of local control.

The first three of Spolsky's conditions have been well met in a number of indigenous groups in the Peruvian Amazon. The reaction

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of many indigenous groups to vernacular literacy (condition 1) was initially very positive. Most of them had had enough contact with the outside to be aware of the existence of literacy and the power of the written word; yet their contact with Spanish was not for the most part great enough at the time to make them scorn their own language and desire literacy in Spanish (an exception would be the Yagua, whose intensive contact with the outside did in fact cause such an attitude, and a few other groups that have since discarded their own language entirely, such as the Iquito, Jebero, Toyoeri, and Orejón (Ribeiro and Wise 1978)). Perceived uses of literacy (condition 2) have included intragroup correspondence, vernacular education (especially in math skills, which are considered of great practical use), and access to both translated and indigenous religious materials such as portions of the New Testament and books of locally composed hymns. Institutions such as the community bilingual school and church quickly became nativized among these groups due to the extent of local control and vernacular use in both of them (a not uncommon situation, as Spolsky notes in 1983:464-6). Widespread monolingualism in the vernacular (condition 3) was the norm at the time of vernacular literacy introduction. Although bilingualism in Spanish has increased since that time, the indigenous language remains the dominant one in most of these groups.

The two outsider-mediated conditions also initially promoted vernacular literacy among the Amazonian Indians. In most cases, the foreign missionaries and educators who introduced literacy among these groups strongly encouraged vernacular literacy. Exceptions included certain mission groups among the Campa (Anderson 1993) and many of the early Catholic missions in the Amazon (Chaumeil 1981, 1986). The Peruvian government policy also supported early programs of literacy in the vernacular and provided official sanction of vernacular education programs (Trudell 1989). Finally, the fledgling bilingual education system in the Amazon was strongly oriented toward maintenance of the vernacular, allowing native communities to have substantial decision-making power over the local schools.

Thus, the strong initial acceptance of vernacular literacy by many Amazonian groups of Peru may be explained in terms of the extent to which these five conditions were fulfilled. Ongoing acceptance of vernacular literacy also appears to be a reasonable possibility as these conditions continue to provide an atmosphere that is sociolinguistically conducive to its practice. However, these conditions are not immune to the influence of changes in the social, linguistic, and political

environment of an indigenous group. Where vernacular literacy has not been ongoing among these groups, it has been principally due to the incursion of Spanish language and cultural influences. Use of vernacular literacy, or of the vernacular itself, may easily lose value (practical or prestige) in the face of the more powerful and prestigious national language. In addition, variations in the national government educational policies, as well as political turmoil in the indigenous communities, have had significant effects on the success or failure of vernacular literacy education.

Thus, the strength of vernacular literacy as an institution should not be overestimated. The likelihood of its maintenance along with acquisition of Spanish fluency (spoken or written) is not a foregone conclusion; this problem is one aspect of the dilemma of biliteracy.

3. SPANISH LITERACY VS. VERNACULAR LITERACY

The second aspect of the biliteracy question lies in the differences between vernacular literacy acquisition and national language literacy acquisition for the indigenous person. Literacy in Spanish and in the vernacular at first appear to have much in common for the Peruvian jungle Indian. Both are taught in the bilingual school, and both seem equally accessible. However, the differences between the two are actually substantial. An analysis of four components of the reading task—knowledge of the language, mental organization of prior knowledge, specific reading skills, and the social context involved—demonstrate the extent of these fundamental differences.

3.1. Knowledge of the language

Knowledge of the language to be read implies an understanding of the grammar, vocabulary, and morphophonemics of that language. The vernacular speaker has gained most of this knowledge by a relatively early age; certainly a child of five possesses enough linguistic knowledge of his mother tongue to be able to learn to read. Indeed, Garton and Pratt (1989) note that "both Vygotsky and Bruner proposed that spoken and written language should develop in a natural way through the child's interaction with the people of the culture in which he is growing up" (p. 52).

However, the complexity involved in a child's mother tongue language development becomes evident when an attempt is made to find a parallel level of second language knowledge. First language learning proceeds in a holistic way, involving phonology, syntax, semantics and pragmatics; thus, the young child learning to read in his

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mother tongue brings a multifaceted, though not complete knowledge of the language with him (Garton and Pratt 1989). In contrast, a second language is not generally acquired as comprehensively as the first, at least not in the Amazon jungle. Rather, isolated phrases and words are learned, specific to certain situations and heavily dependent on physical context. The extent and type of language ability typically gained in a second language are not qualitatively equal to native language ability, at least in the early and intermediate stages. Cummins and Swain (1986) discuss a study of English-speaking Canadian children who had spent seven years in a French immersion program:

> The picture which emerges from these results, then, is one of a group of language learners who, although they have in some respects reached a high level of target language proficiency, are still appreciably different in their use of some aspects of the language from native speakers. This appears to be particularly evident in those aspects of communicative proficiency which demand the use of grammatical knowledge. (p. 128)

In addition, conversational fluency in a language should not be confused with proficiency for cognitive/academic tasks in that language, as is noted by Cummins and Swain (1986). For this reason it should not be assumed that a second language speaker, even though apparently fluent, has the language proficiency required for "native speaker level" understanding of a text. Natural written text may contain syntax and discourse features which are easily understood by a native speaker but beyond the language ability of even a conversationally fluent second language speaker.

3.2. Mental organization of prior knowledge

Comprehension, the most important component of the reading process, involves fitting the ideas in what is read into some kind of mental framework that gives the text meaning for the reader:

> To say that one has comprehended a text is to say that she has found a mental *home* for the information in the text, or else that she has modified an existing mental home in order to accommodate that new information. (Anderson and Pearson 1984:255)

The way a reader organizes his knowledge has a strong impact on how he comprehends what is read. According to current reading theory, the reader's schema, or organized knowledge of the world, provides

the basis for comprehending, learning, and remembering text (Anderson 1984). Schemata help the reader to understand the relationships of elements in the text, as well as the nature of the elements themselves. Thus, according to Anderson, "comprehension is a matter of activating or constructing a schema that provides a coherent explanation of objects and events mentioned in discourse" (1984:247).

One important premise of schema theory is that a text may be interpreted in different ways by different people (Bransford 1984). A reader's age, background experience, and other cultural and personal characteristics affect the schemata that he uses to make sense of written text. Anderson mentions one implication of this:

> Minority children may sometimes be counted as failing to comprehend school reading material because their schemata do not match those of the majority culture. Considering the strong effects that culture has on reading comprehension, the question that naturally arises is whether children from different subcultures can be assumed to bring a common schema to written material. (1984:255)

Vernacular literacy acquisition is understood to utilize vernacular texts for instruction and practice. Especially in the small, homogeneous Amazonian groups, few concepts exist in the language that are not understood by all. Thus, texts written by or in consultation with native speakers should require only existing schemata in order to be comprehended.

Spanish literacy acquisition, on the other hand, requires more from the Peruvian Indian: not only must he understand the vocabulary and linguistic structure of the Spanish language, but he must also have (or construct) the schemata necessary for comprehension of the text. All of the characteristics—personal and cultural—that make the Amazonian Indian different from the Spanish-speaking mestizo, work against the Indian in this situation. So, in terms of text comprehension, vernacular literacy acquisition and Spanish literacy acquisition require far different mental tasks of the vernacular speaker.

3.3. Specific reading skills

Specific reading skills are necessary for reading in any language; they include decoding and word attack ability, as well as the use of context. Because these skills are basically cognitive and not specific to

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any one language, they need only be learned once; a person who has learned to read once can transfer that ability to any language (Gudschinsky 1973).

However, the child who is taught these cognitive skills using a language in which his proficiency is low suffers the negative effects discussed by Baker (1988). He warns that even a child with some conversational ability in the second language may not be ready for teaching in that language; he may "fail to understand meanings and be unable to engage in higher-order processes such as synthesis, discussion, analysis, evaluation and interpretation" (p. 179). The child's ability to learn reading (or other academic) skills is impaired by his limited ability in the language of instruction.

So, although reading skills once attained can be transferred to a second language, their attainment calls for instruction in a language the pupil understands. In this way, Spanish literacy acquisition among the ethnolinguistic minority groups of the Amazon is limited by their Spanish language ability and experiential background.

3.4. Social context

The social component of reading deals with the perceived uses and contexts for reading skill acquisition and practice. Reading learned only in a school context, with little reinforcement of the skill in the home or other natural environment, is perceived in a much more limited way than reading modeled or even taught in a natural, non-school setting. For the Amazonian Indians, literacy in Spanish and in the vernacular is divided exactly along the above lines: reading and writing in Spanish is limited to the school and to occasional legal matters conducted outside the community. Vernacular literacy, however, is practiced not only in the bilingual school but in the church, in any local cooperative, and in homes. Natural opportunities for reading in the vernacular are far more common than are those for reading in Spanish.

The intertwining of language and reading competence in social contexts is well illustrated in Hornberger's comparison of Andean Quechua children who attended Spanish-only or bilingual (Spanish and Quechua) schools (1988). She found that the bilingual classrooms were characterized by much more class participation, spontaneous commentary, and interpupil interaction (in Quechua) than was found in the Spanish-only classrooms. Furthermore, students demonstrated that they read for meaning in Quechua, whereas in Spanish reading performance consisted largely of repetition of memorized text.

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Students even spontaneously practiced their Quechua reading outside of school; borrowing new Quechua textbooks, they would "sit clustered around the books for as long as possible, even up to an hour, taking turns reading aloud" (p. 113). As for writing, Hornberger states that "writing in Quechua comes so naturally to a Quechua-speaking child that once I observed a Quechua second grader write even his Spanish assignment in Quechua" (p. 115). Although it is unlikely that these children see very much modeling of vernacular literacy activities at home, the ease with which they incorporate vernacular literacy into other activities is striking when compared to their stilted, restricted practice of Spanish literacy.

Thus it is clear that Spanish literacy and vernacular literacy differ widely in both what they require of the vernacular speaker and their utility for him or her. The implications of the two types of literacy are also substantially different. Successful Spanish literacy acquisition for the Amazonian Indian implies fluency in that language, which in turn assumes a significant degree of exposure to natural Spanish (as opposed to word lists and memorized dialogue, the typical second language learning tools used in schools). Unfortunately, such exposure and contact between a low-prestige minority language and a high-prestige language is nearly always detrimental to the minority language and culture, as Skutnabb-Kangas warns (1981). In most cases, asymmetrical contact with Spanish language and culture is the only kind of contact available to the Amazonian groups. Thus, Spanish literacy acquisition has implications that may be inimical to the maintenance of indigenous language and culture in the Amazon. The implications of successful vernacular literacy acquisition include the establishment of domains in the society for vernacular literacy use (Heubner 1987, Spolsky et al 1983), as well as a degree of satisfaction with the mother tongue and the identity it represents. Motivation for vernacular literacy may be religious, pragmatic or related to group identity; however, a fairly healthy ethnic self-image underlies it all.

4. CONCLUSION

Given these substantial differences between literacy in Spanish and in the vernacular, as well as the vulnerability of vernacular literacy in the face of Spanish fluency, one might ask whether biliteracy is possible or even desirable for the Amazonian Indian groups. What is the point of promoting both vernacular literacy *and* literacy in the language most likely to undo it? Will promoting national language literacy not actually harm those who need vernacular literacy the

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most, making literacy in any language less likely? These are important questions. Nevertheless, it is the goal of both Peruvian government education policy and many indigenous leaders that minority ethnolinguistic groups achieve biliteracy; indeed, examples of successful achievement of this goal do exist.

What does seem clear is that efforts to promote biliteracy must take into account the potential dangers of this goal for most Peruvian Indian groups. Any group's attainment of biliteracy will require (1) an environment in which Spanish may be learned naturally, yet without threatening the vernacular language and culture or (2) an exceptionally strong people, very secure in their group identity, who can learn Spanish and still withstand the pressure to assimilate to national language and culture. Without at least one of these two conditions, the outlook for successful biliteracy among the Amazonian groups is questionable.

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SCHEMA THEORY, READING, SHELL BOOKS, AND CURRICULUM DEVELOPMENT

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1. WHAT IS SCHEMA THEORY

As the name implies, schema theory posits the key to readers' being able to comprehend, learn, and remember by asserting that a reader's *schema* organizes one's knowledge of world into meaningful, related categories. A schema is the term used to define the organizing principle of one's knowledge in the brain. If a person has trouble putting information into meaningful existing schema, the person has trouble learning and comprehending what the information is all about. The following sentence from Bransford and McCarrel (1974) amplify this point: *The notes were sour because the seam split.* While all the words are familiar, the immediate meaning doesn't make sense to most people. Suppose we were to give the additional clue *bagpipe*, and suddenly the meaning becomes abundantly clear. It is because additional information was given that suddenly a coherent schema in the brain could be activated that accounted and connected for all the pieces of the sentence. Comprehension therefore does not consist merely of the aggregate meaning of words, but the ability of the reader to evolve a schema that explains the whole passage.

As a person reads, the printed words are interpreted in the grid of a person's mind, as a person looks for the most reasonable fit. Processes that flow from the print are called *bottom-up* or *data driven*, whereas processes that flow from a person's existing mental categories are called *top-down* or *hypothesis driven* (Bobrow and Norman 1975). Often the hypothesis a reader has about a certain meaning will tip the scales in one direction or another.

Information in a text is culturally organized, and as such is expressive of conceptions and theories about the world (Ochs 1986). The trick of the teacher is to create reading and teaching techniques that adapt to the social and cultural organization of the world of the students. Any new information is presented so that it can be easily organized into meaningful cognitive schemata. To assume that categories are the same across cultures is a mistake. Children quickly organize objects into those categories that the culture deems useful or

important. This is done with biases, predispositions, and assumptions that restrict the range of possibilities and often lead them to fast learning in their own social setting (Markaman 1989).

2. FUNCTIONS OF SCHEMA THEORY

Anderson (1985) proposes the following six functions of schema theory:

A schema provides ideational scaffolding for assimilating text information. The idea is that a schema provides a niche, or slot, for creating text information. . . New information that fits into the reader's schema is readily learned, perhaps with little mental effort.

A schema facilitates selective allocation of attention. A schema provides part of the basis for determining the important aspects of a text. It is hypothesized that skilled readers use importance as one basis for allocating cognitive resources—that is, for deciding where to pay close attention.

A schema enables inferential elaboration. No text is completely explicit. A reader's schema provides the basis for making inferences that go beyond the information literally stated.

A schema allows orderly searches of memory. A schema can provide the reader with a guide to the types of information that need to be recalled.

A schema facilitates editing and summarizing. Since a schema contains within itself criteria of importance, it enables the reader to produce summaries that include significant propositions and omit trivial ones.

A schema permits inferential reconstruction. When there are gaps in memory, a rememberer's schema, along with the specific text information that can be recalled, helps generate hypotheses about the missing information.

The implications for teaching, learning, and curriculum development are many, based on the above criteria. The goal of the teacher is not only to have students make new schemata, but to integrate and develop more sophisticated schemata. Instead of having pockets of isolated knowledge, the teacher attempts to reassemble knowledge and add new knowledge so that a student's understanding is a connected, coherent whole.

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3. IMPLICATION FOR TEACHING AND CURRICULUM DEVELOPMENT.

The implications of schema theory are that teachers and curriculum developers develop learning material that activates a relevant schema in the mind of the learner. In terms of working in cross-cultural education, these relevant schemata cannot be presumed across cultures, and so an individual, cultural specific curriculum and teaching style needs to be developed.

The teacher and curriculum developer also need to present materials in a schema, map, or matrix format, so that material is processed in a meaningful, holistic schema. Recent research has shown that presenting classroom material in lecture format reduces the possibility of students' looking at the subject matter in terms of higher levels of thinking (Brandhorst 1989). However, when information is presented in a schema or matrix form, students can easily compare, contrast, and make judgments on the information at hand. The following science illustration comparing moths and butterflies will illustrate this point:

> A moth has two sets of wings. It folds the wings down over its body when it rests. The moth has feathery antennae and spins a fuzzy cocoon. The moth goes through four stages of development.
>
> A butterfly also goes through four stages of development and has two sets of wings. Its antennae, however, are long and thin with knobs at the ends. When a butterfly rests, its wings are straight up like outstretched hands.

Test questions based on a narrative like the one above usually result in the teacher asking questions such as: "Describe the wings of the moth" or "What is the texture of the antennae of the moth?" Such questions only require the student to be able to memorize the text and retrieve the material from long term memory for the test. The test therefore evaluates the ability for students to memorize, and does not measure the student's ability to think. Higher level thinking questions, however, would ask the student to compare and contrast the antennae of moths and butterflies, or demand that the student analyze the key differences between moths and butterflies.

Such higher level questions, however, are very difficult for students to answer, because the student needs to do two things: (1) restructure the information in the text that will enable him to make comparisons

and (2) make the necessary cognitive judgment about differences and similarities. In order for the teacher to get the student used to thinking at higher levels, the teacher can help the student by presenting the information in a way that will help the student in the higher level questions that will be asked. This can be done by presenting the same information in a matrix format as shown below.

Figure 1. Matrix Format

Moths and Butterflies

	Moths	Butterflies
Wings at rest	-two sets	-two sets
	-folded over its body	-straight up
Antennae	-feathery	-long and thin
		-knobs on the ends
Stages of development	-four	-four
Cocoon	-fuzzy	(missing information)

When one examines the lecture/text format and the matrix, we find the same information given. However, students would have a much easier time answering higher level questions if they had learned the information from the matrix. One could ask to compare the characteristics of moths and butterflies and expect a reasonable answer. But, ability to answer this higher level question on a written test would require many more steps by the student without the matrix. The student would first have to retrieve all this knowledge from long term memory, restructure it, and then compare and contrast the information to answer the question. In short, the students would have to come up with their matrix.

By asking questions at higher levels, we avoid having students just memorize things by rote. Posing questions that ask the student to compare and contrast, analyze and make judgments requires cognitive action by the student, not just rote memory.

Another benefit of presenting information in a matrix form is that it shows teachers where they may have gaps in their presentation. When examining the text/lecture format, one did not easily notice that the cocoon structure was discussed for the moth and not for the butterfly. This kind of information is easily spotted when subject matter is presented in a matrix format.

A schema that may be used for students in analyzing stories and to think about what they have read may be structured as follows:

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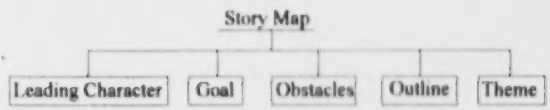
Figure 2.



By encouraging and promoting thinking skills in the curriculum, teachers contribute a skill that goes beyond the classroom. Teachers need to make students conscious of what they are doing. (When a student is thinking about a question, the teacher should encourage the thinking processes, and guide the student in the best decision making strategy for the problem at hand.) If students can effectively think their way through an issue, they will undoubtedly do better in school, will be better equipped to address personal issues, and will be able to address effectively issues foreign to their culture and world view.

4. SCHEMA THEORY, SHELL BOOKS, AND CURRICULUM DEVELOPMENT

The usefulness of Shell Books has been illustrated in the work presently being done in Papua New Guinea. By creating a textless book that has illustration with space to add text, differing languages can choose the book they want, and add their text. It is the conviction of the author that in situations where one is asked to make curriculum that is applicable and useful to many differing languages, a shell curriculum could be constructed that integrates schema theory and the principles of critical thinking. For example, if a country has decided to have in their primary science curriculum a section on moths and butterflies, textless pages could be constructed, with areas for the students to fill in the necessary information (this illustration is based on the previous illustration of moths and butterflies). The teacher would then have the students write in the information in the appropriate slots as they are discussed and taught in class. In this manner, the students would have writing practice, and also have their notebooks organized in a way that would leave the teacher free to ask higher level thinking questions. A model page would look like the following:

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Figure 3.

The teacher's manual would have all the answers filled in using either the national language, or the local language. This would vary according to the teacher's ability to understand the national language. If teachers have a poor grasp of the national language, teacher training courses could have the teachers fill in the manuals in their own languages.

Schemata can be created to teach almost anything, from grammar to science to social studies. They not only use a proven cognitive theory, but also encourage writing, higher levels of thinking, and, if used creatively, can be used in multilingual curriculum development projects.

5. WEAKNESSES OF SCHEMA THEORY

Schema theory has prompted a wealth of reading research, with most of it focusing on the following two perspectives: (1) the constructive nature of comprehension, and (2) the crucial role of prior knowledge in the reader's understanding of words and meaning. While having produced excellent research, the following weaknesses of schema theory should not be overlooked:

1. Vague definition: Schema lacks a fixed definition, and many researchers give differing variations of the theory. As Mark Sadoski (1991) points out: "Accordingly, the most influential definitions have been metaphorical. Hence, schemata are defined as 'frameworks' with 'slots' to be filled, or 'packets' of knowledge contained within larger 'packets' of knowledge. A schema is defined as analogous to a play; that is, a general schema is to an instantiated schema as the script of a play is to a particular performance." With a lack of clear definition, it is difficult to define exactly what one is describing. While this vagueness may be cleared after more cognitive research, at the present it is a glaring weakness.

2. Concrete versus abstract in the mind: An activated memory, according to schema theory, selects an abstracted meaning that is catalogued in the brain, along with relevant information to aid in

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comprehension, and integrates all the information to reconstruct the most likely model for what has happened (Alba and Hasher 1983). However, schema theory fails to account for the exactness of one's memory when the mind is asked to make a schema that accounts for all the "pieces of the historical puzzle." The memories of most people are too detailed and complex to activate a schema that will account for all the facts.

3. Accounting for visual images: While verbal and written systems have underlying meanings that are easily accounted for in a schema network which coordinates its structure through relational meanings and semantic categories, memories of visual objects may not be necessarily tied together by semantic categories. The picture one has of a childhood home is an image, and not necessarily a semantic network in interconnections called a schema. Images may therefore be analyzed using a differing mental processing model (Sadoski 1991).

6. CONCLUSION

Schema theory has much to be commended. It has much research to back its claims and can be integrated in such a manner as to encourage higher level thinking skills. While only time will tell if this theory is broad enough to answer some of its critics, it is a working model that should not be ignored.

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MUSIC: A BRIDGE TO LITERACY

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Music is an important part of every culture, though its function in each society may vary. All cultures contain language and music (Chenoweth 1979), and for centuries oral societies have used music as a powerful means of communication (King 1989). Music is a potent memory aid and instructional vehicle. Through music's repetition and poetry, individuals can retain information without its being written. This paper explores some ideas and approaches for using indigenous music to initiate and facilitate literacy instruction.

1. MUSIC FOR MEMORIZATION

As a music therapist for over eleven years, I have seen music used as an effective tool for teaching seemingly unteachable skills. My husband, also a music therapist, and I were asked to work with a twelve-year-old mentally handicapped child referred to us by doctors in Philadelphia. They, along with her teachers, sought creative ways to teach her to tie her shoes and perform several other basic life skills after working diligently with her for over two years without success. I composed a song with step-by-step instructions for shoe tying, which the child quickly learned. In three months she could perfectly tie her own shoes, and shortly thereafter she was tying everyone else's shoes (Seaman 1988)!

Many other children, as well as adults with whom we have worked, learned complex skills through this method. In contrast to learning by rote, music provides an easy, as well as enjoyable means for learning, retaining, and integrating ideas and concepts.

Research confirms what music therapists have practiced since the early 1950s and what oral societies have used for generations. Music combined with lyrics is the most effective verbal tool for accurately retaining and recalling information. In a study of long-term memory, Hyman and Rubin (1990) tested the ability of individuals to recall a Beatles' tune when the subjects were presented with the title and the

first line of the song. Their findings show that not only were the lyrics memorable for many individuals, but the meaning of the song was accessible as well.

A study by Morrongiello and Roes (1990) of adults' and children's ability to retain new songs revealed that children showed better memory for words than for the tunes. Adults showed good memory for both song components, though word retention was the stronger of the two. Nonetheless, the study showed that music is a powerful memory device.

Songs are even more retainable when the music and lyrics are familiar. Baugh and Baugh (1965) researched the effect of four types of music on the learning of nonsense syllables. Their results clearly show that the more familiar the music, the more retainable are the lyrics. For fifty college students studied, rock-n-roll was the most effective music style for learning the material, demonstrating 80% accuracy for recall of nonsense syllables.

2. MUSIC FOR LITERACY

Programs such as *Hooked on Phonics* and *Sing, Spell, Read, and Write* help adults and children learn to read, spell, and write through music. These are phonics-based approaches set to music. Students sing the phonic sounds in story songs or in repetitive songs, like "B is for ball and broom and bike."

The McCrackens' (1972, 1986) learning approach encourages the use of songs and poems to help learners associate written with spoken (or sung) words. Evans and Clynes (1986) found that children retain more story content when it is sung rather then spoken.

Learning takes place when the activity is (1) receptor-oriented, (2) context-oriented, (3) repetitive, and (4) participatory (Wilson 1992). Indigenous music embraces all four of these learning components. Not only are the words in the people's spoken language, but the music is also in their traditional music system. Their music may sound different to our Western ear, and it may not stir the emotion in our spirit that our familiar, traditional tunes do, but their music stirs their hearts and has more meaning for them.

Effective instruction must begin at the level of the student; the material must be developed and presented based on the receptor's current knowledge. Secondly, the context of the material must be based on the receptor's frame of reference. When material is presented in a language and form that is familiar to the learner, it is

receptor-oriented and context-oriented. Stevick (1976) contends that material presented to the learner must have personal significance for memory retention to take place. The more emotional connections the individual has with the reading material, the more rapidly embedded it becomes.

Repetition and participation both focus on the learners' need for interaction and experience with the material because exposure to subject matter alone is not enough for retention to occur. The learner participates by listening, repeating, and memorizing. Memorization by rote is not as effective. Long term retention occurs through repeated experience and interaction with the material (Wilson 1992).

If the music is truly indigenous, it is a powerful *receptor-oriented* tool because it matches the individual's own cultural environment. It is *context-oriented* because the lyrics are from the people's own language and in their poetic form. Our Western rhyming approaches are usually inappropriate! Music is an excellent tool for *repetition* since most people enjoy singing songs over and over. Music is also *participatory*, which is a key factor in the music of oral societies. In some cultures, stories are told with music interspersed throughout, so the listeners can participate in the story-telling directly (Klem 1983). Oral societies have used their music to pass on information for several generations. For them, this method of retaining and recalling information is a common and highly effective tool.

Another element in successful literacy is motivation. If motivation is lacking, literacy never really catches on. Successful learners acquire skills to meet their felt needs (Ewert 1990). Use of literature that people want to read increases motivation. The usual motives for literacy are extrinsic, based on literacy's usefulness. This extrinsic motive does not necessarily stimulate the students' enjoyment of learning, especially if the felt need for literacy is fairly low. Music, on the other hand, offers intrinsic motivation because it is a valued part of oral cultures (Csikszentmihalyi 1990).

3. MUSIC FOR LITERACY PROGRAMS

Klem (1982) in his book *Oral Communication of the Scripture* questions whether oral societies need literacy at all. He cites examples where literacy has only encouraged elitist separation within societies because the privileged who can read begin to control many aspects of the community. This can break down the natural balance of the society. Many oral societies view written communication as

being impersonal, so they favor more personal oral communication. As a culture's motivation toward literacy grows, however, music can be a useful bridge for easing a culture from oral means of communication to written means.

Music and its associated artifacts are a vital part of the Mbore (Papua New Guinea) people's lives. David and Alice Parrish of Pioneer Bible Translators wrote a primer in Mbore, but many of the elders in the community had difficulty identifying drawings in the primer. For example, a drawing of a hand could not be recognized and thus the word associated with the drawing could not be read. This problem was eased when the Parrishes discovered that the Mbore had symbols engraved on their musical instruments that were quickly identifiable by the elders. When these symbols were incorporated into the primer, learning became easier. The traditional symbols aided in making the primer uniquely theirs, and this ownership helped stimulate a desire to read.

Dawn and Steven Clark of SIL in Papua New Guinea developed a primer based on a traditional Sio folksong about a turtle. The text of the song is presented accompanied by pictures drawn by a village artist. Al and Cheryl Jensen of SIL in Brazil wrote a primer for the Waiapi that incorporates many of their traditional folk songs with corresponding pictures. This book also serves as a historical document for the community.

New indigenous songs can also facilitate literacy learning. Pat Ham of SIL utilized the skills of Tom Avery, an ethnomusicologist, to encourage indigenous hymnody as well as to develop literacy among the Apinaye in Brazil. Avery analyzed the Apinaye music and composed 18 songs in their music and language. The printed songs were incorporated into the literacy program and individuals' reading skills greatly improved because of this approach (Boring 1993).

Klem's (1982) research with the Yoruba in Africa offers some insight into music's ability to aid in memorization of content as well as to deepen understanding of meaning. Klem requested new indigenous tunes for Scriptures from some Yoruba composers. The composers used a variety of Yoruba music styles, and Klem made recordings and written texts of each song. Klem then presented combinations of the material to three different groups of readers. One group received only the lyrics, another only the music, and the other both written and oral materials. The group given both written and oral materials

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demonstrated the highest retention and understanding of the material. Klem states,

> The use of appropriate oral methods of communication would not inhibit the growth of literacy but would actually prepare more of the people to readily accept it (Klem 1982:178).

Burke (1976) approached literacy in Iran through broadcasting. He developed a basic radio program to teach, maintain, and improve literacy skills. He used participatory techniques, especially music, throughout the program to involve the students and to maintain interest. Phonetic sounds, as well as words, were presented or reviewed through indigenous tunes. The songs, which were played approximately every five minutes, also taught concepts of health, hygiene, agriculture, nutrition, and the literacy topic of the day.

Mary Stringer of SIL in Papua New Guinea encouraged teachers to use a song every week to go with the literacy theme for the week. They made up songs about rats, frogs, women, houses, and other themes. These were very popular (personal communication).

4. MUSIC FOR YOUR LITERACY PROGRAM?

Music can enhance any literacy program. It can both ease the learning process and make the experience more enjoyable. Indigenous music is the key element, as the familiarity and emotional connections associated with a people's own music motivates people to read and helps them to retain the material.

It is important to encourage people's use of their music by showing that you value their songs and the special events in which they use them. One must know the language well, or have access to the knowledge because song texts must parallel the spoken form of the language as closely as possible. Two areas of caution should be noted:

1. Archaic language is sometimes used in traditional songs. These are probably not appropriate for literacy work.
2. Some cultures create songs spontaneously. These are not always as useful as traditional pieces, which tend to be familiar and predictable.

4.1. Step 1: Assess music's function in the community

Awareness of how music functions in the culture is important. Some questions to ask are:

WHEN is music used?
WHAT values and motivations are expressed through music?

WHO sings or participates in the music making?

These questions are all related and help us to understand some options for the use of music in a literacy program.

WHEN?

This question should explore the domains in which music is used. Is it used to teach? for story telling? for daily news reports? Is it only used during times of mourning? alcohol consumption? celebrations? calling spirits? Choose the songs and their texts carefully. Often songs used in different domains are from different song categories (e.g., drinking songs, rites of passage songs, story songs). Be sure to use songs from appropriate song categories for the age, gender, and status of the students.

WHAT?

It is also important to know what values and motivations are expressed through the songs used for literacy. Songs expressing values different from one's own are not necessarily inappropriate; however, songs portraying values that conflict with one's own should be sifted through carefully. This can be a very subjective decision. Listening to others in the community and seeing how they perceive the song may be helpful. If a particular song is valued for its historical content, teaching, humor, or story line, it could be useful. Sometimes songs may have a double entendre.

Values and motivations are also connected to the method by which a song is composed. Are songs given to composers by spirits? through dreams? through birds? If composition is always associated with magic or mysticism, music's use with literacy may be counterproductive. It is important to know the community's response to a song and what a song means to a community before using it.

WHO?

Knowing who is involved in the music making is very important. If the community has specific singers who always sing certain songs, it may be difficult to have literacy groups sing unless they are the chosen few. In some cultures, individuals have their own song, which is sung at the same time that everyone else's song is sung. This could make literacy through music challenging, but not impossible.

It is important to know who the musicians, singers, and especially composers are in the community. Are they respected? If certain composers are not respected, choosing them to compose some literacy songs could be inappropriate. There are times, however, when

including them may actually raise their respectability in other's eyes. This inclusion could be true of musicians and singers, too. If those who make music are not respected, it is possible that the music may not be respected either. In this case, music might not be a viable tool for literacy. Often, however, an outsider's interest in the music of a culture increases the people's music-esteem.

4.2. Step 2: Incorporate music into the literacy program

After assessing music's function within the community, you may begin to develop an approach to incorporate it into the literacy program. This second step involves determining:

1. Which music styles are most appropriate for literacy?
2. Which song categories should be used?
3. Which composers or compositions should be used?

These are not questions answered by the specialist alone. For acceptance of a literacy innovation, it must (1) involve the community members and (2) function within the community's framework (Stringer & Faraclas 1987).

Begin by working through the existing authority structure and gain the support of individuals who can influence others. These may be musicians, elders, or teachers already present in the community.

Watch for the ways music is used in the community and seek to find parallel ways to use it with literacy. If a particular culture uses call and response songs (where a leader sings a line and then the singers respond to him in the next line), these songs could be great tools for teaching literacy. The teacher could sing a line and students may repeat the line or sing another line in response. Written material could be used to cue students.

Almost anything can be described or discussed through music. Composers in the community should know what is appropriate. Test the songs with small groups of people first before presenting the songs to the whole community.

4.3. Step 3: Use the music in a literacy program:

Community involvement in the music for literacy approach will enhance the program's effectiveness. After thoroughly following Step 1 and Step 2:

1. Use indigenous music as much as possible (including composers and musicians)
2. Use the song categories appropriate for the community

3. Use the music in a way that parallels community traditions.

These suggestions are hardly exhaustive. They offer only a small foundation of ideas and approaches to selecting appropriate music within a culture. Knowing one's limitations is also important. Those with doubts about appropriate approaches or songs should consult an ethnomusicologist. If there are no known or identified composers in the community, most ethnomusicologists in SIL can analyze and compose in the indigenous music system.

5. CONCLUSION

This paper only skims the surface of a huge ocean of potential uses for music in literacy. Continued research in this area could be of great value to the communities in which music and literacy are used together. Oral societies embrace their music if its value is encouraged, and music is a vital element for communication in every oral society. Incorporating their music into our work offers them a meaningful connection to the exploration of a new communication medium, literacy.

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HELPING PEOPLE GET INVOLVED: A CASE STUDY OF THE FORMATION OF A WOMEN'S GROUP IN CENTRAL GHANA

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Theodicia Ofosu-Appeah, who is Ghanaian, earned a B.A. degree in French and English at the University of Ghana Legon in 1987 and recently completed a post graduate diploma in linguistics at the same university. She is Coordinator for Women in Literacy and Development at the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT).

1. INTRODUCTION

A major problem in implementing literacy and development programs is how to get the people concerned motivated enough to start and maintain the programs. Some literacy programs fail because they do not take into consideration the needs and interests of the people for whom the program has been designed.

This situation often arises because women are not directly involved in the decision making. The organizers of the program think they know what the needs of the women are, so they design the program accordingly. Often the women concerned do not fully realize the importance of the program and soon they lose interest, which affects the program.

The big question is, How do we let the women realize that they need to be literate and get involved in development activities without verbalizing it? In other words, how can literacy and development programs get started without making the people feel that it has been imposed on them?

This article is a case study of the formation of a women's group in the Brong-Ahafo Region of Ghana. Though it is a new group, there is every hope that it will grow. The difference is that the people saw the need for it themselves, without its being verbalized by an outsider. They feel the program is for them and therefore its success also depends on them. This article provides one of the many ways in which this problem can be tackled.

2. BACKGROUND INFORMATION

The Mo people, or Dega as they call themselves, live at the southern part of the Black Volta in the Brong-Ahafo Region of

Ghana. They are chiefly farmers but also participate in fishing and trading. Only a small percentage of the female population attends school, and even some of those who do attend drop out of school. Some of the JSS (Junior Secondary School) graduates are semi-literate. Moreover, there are very few schools in this part of the country.

Women play their traditional Ghanaian role of *in-the-home* and *out-in-the-field*. In the former role, they are child bearers, fuel providers, caretakers, etc. Outside the home, they help their husbands on the farms. In addition, they cultivate their own groundnut farms. In most cases, the sale of groundnuts is one of the financial resources for the women. Another source of income for them is the sale of firewood. Few women are traders, and fewer are government workers, for very few women have been to higher education institutions.

3. FACILITATION OF THE PROGRAM BY GILLBT MEMBERS

Patricia Herbert and Marjorie Crouch, GILLBT managers of the Mo/Dega project facilitated the formation of the women's groups. They have already translated the New Testament into the language. In 1991, they invited the community nurse in the area to give a series of talks on health to the women. The meeting place was GILLBT's literacy office. They chose this place because the women might feel uncomfortable if the men were around, which would affect their participation in the discussions. Only two men who work on the project were present.

The first topic was AIDS. After the discussion, a key word was selected from the topic (in this case *wila*, meaning sickness) and written on the board. The teacher got the women to repeat it after him. Then it was broken down into syllables *wi la*, and the women were taught how to read them.

The next topic treated was anemia. Again, a key word *bichale* was picked, and the word as well as its syllables were taught, after which the previous lesson was reviewed. The following topics were covered in this way:

1. Acquired Immune Deficiency Syndrome
2. Anemia in children: causes and prevention
3. Anemia in pregnancy: causes and prevention
4. Hygiene in pregnancy
5. Schistosomiasis (bilharzia)
6. Mumps or infective parotitis

7. Worm infestation. More emphasis on *Taemia solium*
8. Importance of immunization
9. Diarrhea
10. Gonorrhea
11. Common cold or catarrh
12. Family planning
13. Malaria
14. Cholera
15. Tetanus
16. Measles
17. How to be financially independent
18. Convulsion in children: causes and prevention

As in previous lessons, a key word was chosen after each topic and learned. Most of the women were enthralled. Some of them had been thinking that learning was a unique experience specifically meant for intelligent children. At the end of the fifth lesson, seven women declared their desire to learn how to read and write and enrolled in the literacy class they had previously shunned. Thus the desire to become literate came from the women themselves, though the way had already been prepared psychologically.

The topics concerned their very existence and so interest was easily stimulated. They realized how much their ignorance about these topics had cost them and that they could read about these themselves if only they could read and write. Their ability to read at the end of each lesson convinced them that they could become literate.

The women had not as yet thought about coming together to form a group. Again Herbert and Crouch sowed the seed. Someone was invited to teach the women some income generating activities. He taught them body cream making, bee keeping, mushroom growing, and raising rabbits. What really attracted their attention was the making of body cream, so they expressed the desire to continue this activity. They still, however, had not thought of coming together as a group.

At about this time, April 1992, GILLBT was organizing a workshop at Bole. Elizabeth Dentey, a Mo school teacher, now the women's group leader, was selected to be among the participants.

In a personal interview with her, she said that it was at this meeting that she realized that what they needed to do in New Longoro was to form a small group of women to start a development program—this was stressed at the workshop. When she returned, she went to see the chief and informed him about her intentions. When

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this idea was presented to the women, they welcomed it and immediately formed a group. GILLBT provided them with the necessary ingredients for making body cream. It was a success! The women now make and sell body cream to the community. There are plans to teach them soap making and production of parozone, a bleach.

Thirty-five women were in the group. To make all members more active, they divided into three groups, each with its own leader.

4. FINANCIAL ASSISTANCE

Herbert and Crouch heard about the Dutch organization CAP, which financially assists small women's groups. The women's group wrote a project proposal. The result was about $344, which the group members had to go and collect from the Dutch Embassy. It was a great experience for them, for besides writing a project proposal, they had to write a constitution and make by-laws for the group. Moreover, Dentey said that even though she is a teacher, this work has exposed her to a lot of things, and they all have learned a lot. The experience has made the women more confident, and the leaders are more sure that they can boldly face the outside world.

This has had a positive effect on the women. Now about 12 other women in the group have enrolled in the literacy class. The women have made a one-acre tomato farm. The marketing of this produce will be at the New Longoro market, one of the largest markets in the area. Dentey has also visited nine other villages, and because she is from that part of the country and stays there, the response is encouraging (they see the program as not a foreign idea that has been imposed on them). Out of the nine villages visited, three (Kandige, Jama, and Sabule) have had improvement in literacy programs and have started at least one income generating project, such as farming and production of pomade/body cream for sale. In Jama, the women are thinking of establishing an orphanage.

5. CONCLUSION

The figures given may not look impressive. However, when one considers that for the past ten years attempts have been going on to get the women interested in both literacy and development activities without much success, getting 19 women seriously motivated within two years is quite an achievement.

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The program has provided for the women the chance to choose for themselves what will be beneficial to them. For the first group of women, they saw literacy as the ability to read and know more about the world, a way of increasing their knowledge and thereby improving their existence. For the second group the situation is more complex: they know that literacy will expose them to a wider world, and at the same time, it is a means of gaining the confidence needed to face this bigger world.

This manner of approaching the situation provides the women with a way to operate within what is culturally appropriate for them, which may differ from village to village. For example, in New Longoro it sufficed to initially get the approval and support of the chief to get the program started, whereas in Kandige, the women had to convince their male counterparts of the relevance of forming such a group.

The formation of the group has created stronger bonds among the women in each village. Also, some of the women are becoming more confident in themselves, and it has given them the opportunity to think positively about improving their situation and finding ways of solving their problems. Since they started the program, and it was not just imposed, they feel committed to it, and at the same time, it is a challenge to them. The women who have not yet joined them are watching and will gladly laugh at them if it fails. On the other hand, women in the program are aware that success of the program will encourage others who are skeptical to join them.

Women will be motivated to get involved in literacy and development programs when programs are designed to cover their interests and needs. The women can best identify these. By exposing them to a number of choices, they can decide what is best for them and work on it. This practice has another advantage: the women will feel they initiated the program, and so its success depends on them. Their total involvement will mean they shall be working within culturally appropriate norms that will meet the approval of the community.

As much as possible, the participation of outsiders should be kept minimal so the women will feel responsible for the projects. Instead, they should provide moral support, advisers, and assist financially where necessary. Above all, every effort should be made to avoid letting the women feel the programs are imposed on them. They should be encouraged to realize their importance in the community.

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ABSTRACT

Davis, Patricia McKerihan. 1988. Education for the future: Towards Spanish as a standard language curriculum for Native American Peruvians. Master's Report, University of Texas at Austin. 119 pages. (Available from the editor, *Notes on Literacy.*)

From 1964-1984, Pat Davis worked as a literacy specialist with the Peru branch of SIL in planning, teacher training, and materials preparation for bilingual school programs. She is author of the book Cognition and Learning *and co-editor and co-author of* Bilingual Education: An Experience in Peruvian Amazonia. *Presently she is completing Ph.D. studies in Curriculum and Instruction at the University of Texas at Austin.*

In 1952 a bilingual school program unique in the history of education in South America was signed into law by Peruvian Minister of Education, General Juan Mendoza. Its uniqueness was multifaceted: it was the first government school program created for the aboriginal ethnolinguistic groups of Amazonia; it was to be conducted in the native languages; it would employ native teachers. In those pioneer days isolation and monolingualism were such that there was little thought of the native languages being lost (although more recently the concept of language maintenance has been incorporated into educational planning). The need to preserve Peru's rich linguistic heritage was recognized, however, as well as the need to establish contact with native groups, who—marginated by language—could neither take advantage of public services nor assume their rightful place in the national life.

In answer to these needs, the bilingual school program was designed:

a) To provide the authorities a means of establishing contact with the jungle peoples and to help the native groups take advantage of government services.

b) To ameliorate cultural clashes by training native teachers and assigning them to their home villages, even though this meant upgrading individuals with scant educational background.

c) To promote wholesome interaction with the rest of the country by:

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1. Providing education first in the native languages. (Benefits: new concepts would be grasped first in the mother tongue and self-esteem would be enhanced.)
2. Teaching Spanish, the national language as the language of wider communication.

In 1988, thirty-six years later, more than 500 bilingual schools enrolling over 15,000 students lay widely scattered over a rectangular area of approximately 200,000 square miles. This territory covers the eastern one-third of the country, reaching from the rugged, jungle-clad peaks of the Andean foothill ranges to the steaming lowlands of the tropical rain forest which borders Ecuador, Colombia, Brazil and Bolivia. The program serves twenty-eight language groups. They are isolated from each other by geographical barriers, political boundaries, lack of roads and transportation but were administered by a decentralized school system consisting of six large educational regions and some thirty-four district offices. Since the bilingual schools have needs different from the other public schools of their districts but similar to each other, inter-district bilingual teacher-training courses are held periodically. Representatives of up to twenty ethnolinguistic groups may attend the larger training courses. The language of instruction in these courses is Spanish.

The curriculum for the bilingual school program has been developed building upon linguistic and cultural studies carried out in the jungle languages, chiefly by field researchers of the Summer Institute of Linguistics. Skilled educators, both Peruvian and expatriate, have provided culturally appropriate instructional materials, which—upon testing—have proved successful. Increasingly, the native people themselves have assumed responsibility for supervision and also some textbook production under government auspices. The teaching of Spanish as a second language, however, remained a weak link in the program, partly because of the enormity of the differences between the Amazonian languages and Spanish, partly because few SIL staff members were trained in the preparation of second language materials. A number of texts were prepared and used with varying degrees of success, but testing revealed gaps in the teaching progression and the need for more mid and upper-level materials.

In response to these needs, this Master's study was undertaken with the goal of reviewing the language teaching field, compiling

the language teaching principles most appropriate for shy native students, and developing an outline for a complete Spanish course from novice to advanced levels. In the process, it provides information and guidelines useful for the teaching of second languages in many of the countries where SIL members work.

Chapter 1, the theoretical review, highlights Steven Krashen's Monitor Model of second language acquisition—an approach which emphasizes learning by listening to natural, comprehensible speech without pressure upon students to produce until they feel comfortable in doing so. This method, of all those currently in use, was deemed the most appropriate for students of societies who are embarrassed to be singled out in public but who respond well to group activities. The chapter includes a review of methods new in the last twenty years, a discussion of measurements of proficiency, and charts indicating normal time requirements for second language learning—requirements which, incidentally, are far in excess of the time usually allowed.

Chapter 2 discusses learner characteristics in terms of holistic and analytic learners, lists traditional learning strategies, and makes suggestions for educators.

The characteristics common to several successful language teaching programs are identified: Well-trained, enthusiastic teachers, administrative commitment to and active support of the language teaching program, and allocation of adequate time in the curriculum. Strengths and limitations of the Peruvian setting are also analyzed. For example, Spanish is radically different from the Amazonian languages and, in a series of ways, is extremely difficult for minority language speakers; however, motivation to learn Spanish is high and this proves to be a counterbalancing factor.

Chapter 3 discusses the decisions which must be faced by educators planning any second language program: What level of attainment is expected as the end goal? Are all six areas of concentration—listening, speaking, reading, writing, culture and grammar—to be taught equally, or should some aspects be given more priority than others? How is regional speech to be balanced against standard speech? How much administrative support can be expected in terms of setting reasonable goals, funding instructional materials, allotting sufficient teaching time in the

school day, preparing teachers, including the second language program in the grading scheme?

Chapter 4 contains a suggested teaching outline based on activities. Seventeen levels , from novice to advanced, address all six areas of language learning (listening, speaking, reading, writing, culture and grammar). The grammar sequence is based upon analysis of several series of Spanish as a second language textbooks used in United States elementary schools, high schools, and universities. From the outline, lesson units can be developed. This chapter, although Spanish-specific, demonstrates principles of language teaching and lists activities appropriate for many language groups.

A bibliography of over one hundred references provides an overview and update of the language teaching field current to 1988.

POST SCRIPT: The teaching outline described above is now forming the basis for a textbook-making seminar in Peru in which a committee of native bilingual and non-native monolingual Peruvian teachers are learning to prepare Spanish as a second language textbooks.

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REVIEWS

Alphabet roots. By Wally Kennicutt. Waxhaw, NC: Summer Institute of Linguistics, 1989. Pp. 32. $1.80.

Reviewed by Marvin Beachy

My reading of *Alphabet Roots* was an informative, pleasant experience. I learned about people who have created or adapted alphabets and those who have deciphered long-forgotten writing systems. In other words, I learned some of the history (*roots*) of the world's major writing systems (*alphabets*).

As the subtitle, *A Glimpse of the Alphabet Museum*, suggests, this booklet contains highlights of the extensive research that went into the making of SIL's Alphabet Museum in Waxhaw, North Carolina. The information presented is advanced enough to interest linguists, but the author writes with an audience of non-linguists in mind. At $1.80, the booklet would make an excellent, inexpensive addition to the history or language sections of school libraries. It would also be a good addition to church libraries because of the significance alphabets have had, and are still having, in the work of Bible translation.

The table of contents lists the titles of 35 short sections that average less than one page in length. While each section covers a different topic, good transitions give cohesiveness to the entire booklet. Katherine Voigtlander illustrates most of the topics with small, black-and-white drawings.

Section 1 uses the story of Helen Keller to illustrate the significance of written communication and explain the value of the Alphabet Museum. Sections 2-6 deal with ancient writing systems and those who have recently helped to decipher many of them. Sections 7-10 explain alphabet developments in Europe during the Middle Ages and soon thereafter. Sections 11-22 describe alphabet developments in the Middle East, other parts of Asia, and in the Americas. Sections 23-27 discuss various systems of writing numbers, music, and writing for the blind. Sections 28-35 deal with some of the challenges modern linguists have faced and their eventual triumphs. The last paragraph challenges future linguists with the statement: "About half the languages of the world have never been written." It concludes by asking who the alphabet makers for those languages will be (pp. 31-32).

My favorite parts of the booklet are the ones that describe King Sejong's script for the Korean language (pp. 19-20) and Sequoyah's

script for the Cherokee language (pp. 22-23). These are inspiring accounts of men who created ingenious, simple scripts for their own languages. They made literacy accessible to the common people who spoke those languages.

The alphabet makers. By Katherine Voigtlander and Karen Lewis. Huntington Beach, CA: Summer Institute of Linguistics, 1990. Pp. 96. $13.50.

Reviewed by Marvin Beachy

The Alphabet Makers is a conversation piece—a book for the coffee table. This full-color picture book brings a tour of SIL's Museum of the Alphabet into your living room, usefully presenting alphabet makers throughout history.

Instead of the customary table of contents, you will find a museum floor plan with the note: "This book follows approximately the same path as the museum floorplan" (p. 7). At first glance the layout appears to be chronological, beginning with ancient writing systems such as Mesopotamian cuneiform and Egyptian hieroglyphics and ending with modern alphabets. But a closer look reveals that the logic behind the layout has as much to do with geography as chronology. Various ways to represent numbers and music, writing for the blind, and sign language for the deaf are covered briefly on pages 70-75.

Though it is a picture book, it also contains a lot of technical information. Professional linguists will use this material, especially the bibliography with its more than 300 entries. They will also find some excellent examples for explaining their linguistic work to non-linguists.

Many individuals contributed toward the creation of this book. The resulting quality is better than any one person could have achieved. Page 4 lists 12 volunteers who produced the book, and page 91 lists over 250 who worked toward the development of the museum.

I found the section on modern alphabet making (pp. 76-90) to be the most valuable. It describes the work of today's alphabet makers from Latin America to Papua New Guinea. These accounts point out the value of recent alphabet making and the continuing need for more linguists to bring literacy and Bible translation to minority groups around the world.

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Whole language: What's the difference? By Carole Edelsky, Bess Altwerger, and Barbara Flores. Portsmouth, NH: Heinemann Education Books, 1991. Pp. 117. Paper $10.95.

Reviewed by Eric Jones

Over the past few years, the phrase *whole language* has engendered considerable popularity among educational circles, but the concept itself has often been widely misused. For this reason, three prominent practitioners of whole language theory have attempted to clear the haze through their book *Whole Language: What's the Difference?* The authors argue that whole language is not an educational *method* but rather a *theory* about how people learn based on language and language acquisition. Under the umbrella of whole language theory, a number of teaching strategies may be employed, but only those consistent with its basic theoretical premises are legitimately termed "whole language." For this reason, whole language does not lend itself to eclecticism and incorporation into other teaching theories. A "whole language basal" is entirely inconsistent with the paradigm, since "basal" implies methodology.

So just what is the theory of whole language? The authors discuss the answer to this question in the section "Whole Language: What It Is." Here, whole language is shown to be a framework based on how language is used and how language learning develops. Language is a highly social phenomenon used between and with people for the purpose of transmitting (and oftentimes modifying) culture. People learn language by *using* it, not by studying about it. Language learning makes use of the predictable and redundant nature of linguistic subsystems (i.e., the phonology, syntax, semantics, and pragmatics). But the contextual and interdependent nature of language and its linguistic components precludes the possibility of "breaking" language up into sounds, syllables, words, and other components. The total context provides the potential for learning and understanding. Thus, whole language practitioners do not employ word attack skills, or other isolating methodologies used to "build" language from bottom to top. Pieces of language do not make up language; natural context, social meaning, and the clues of a total linguistic system cannot be construed apart from the whole.

In the section "What Makes Whole Language Different" the authors discuss some outright misconceptions about whole language. For example, whole language is not the same as "whole word" or "skills in context". Whole language is then compared with other

popular theories that historically precede it, such as Progressive Education, Language Experience, Open Education, and Writing Process. In contrast to whole language, many of these theories have held to the belief that it is important to explicitly teach isolated skills (word attack, etc.). In addition, many of these theories sanction the teaching of reading and writing apart from the functional or aesthetic contexts in which real language is used. With whole language, context and content reign supremely.

The section "What Whole Language Looks Like in the Classroom" provides six actual examples of whole language in practice: a kindergarten class learning how to read, write, add and subtract, and to make decisions as they run their own working "grocery store"; a group of fifth and sixth graders conducting an in-depth discussion and critical evaluation of a rather sophisticated piece of literature; a teacher responding to a young child's daily journal entry, which gives the student an opportunity to articulate his owns ideas without fear of being tested or checked for errors; and three additional scenarios of equal intrigue. These fascinating examples lend merit to the potential of whole language.

Whole Language: What's the Difference? should be essential reading for all who are involved in education. The authors have succeeded in presenting a lucid account of an important theory, which proponents of other theories must take into account if they are to remain serious about their own educational endeavors. The book is both highly readable and highly valuable.

Understanding reading: A psycholinguistic analysis of reading and learning to read, fourth edition. By Frank Smith. Hillsdale, NJ: Lawrence Erlbaum Associates, 1988. Pp. 365. Paper $24.95.

Reviewed by Mike Steinborn

"Reading is not something that is taught. It is something that is learned." This unique perspective forms the basis of Frank Smith's interesting and thought-provoking approach to reading in *Understanding Reading*. Over the past twenty years, Smith has established himself as an authoritative researcher in the field of literacy. His books on reading and writing, learning and teaching have had considerable influence in education in the English-speaking world. It is not hard to see why. Drawing on a wealth of research and

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theory, *Understanding Reading* looks at reading in the larger context of human learning. Smith's book is both informative *and* readable! He examines how psychological, physiological, linguistic, and social factors affect reading and learning to read.

The book is organized into several sections, each of which builds on previous material. The first five chapters deal with topics such as comprehension, knowledge, language, vision, and memory, not by any means exhaustively, but with a view to how these relate to the complex act of reading. It is especially interesting to note the tremendous limitations of the visual system and memory in the reading process. Subsequent chapters make a more detailed analysis of reading.

The final three chapters bring together what has been looked at so far and discusses implications for learning and teaching. Chapter 11, "Learning About the World and About Language," outlines some basic principles of learning *and* presents one of the most intriguing concepts in the book: Reading should not be regarded as a special kind of activity requiring special kinds of skills or abilities unlike any other used in life. Instead, learning to read requires the same fundamental principles and approaches to learning that comprehension of other things in life require.

Smith's repeated emphasis on the importance of nonvisual information in relation to learning and reading represents an important insight into the learning process that is often overlooked by reading teachers. When confronted by something we cannot comprehend, we use what we already know to help us make sense of it. This includes written material. When it comes to comprehending writing (assuming that the primary goal of reading is comprehension, not merely the sounding out of words), the possibility of reading or learning to read is greatest if the content and nature of a text corresponds to something the reader already knows. Smith maintains that "Readers usually focus their attention on meaning and become concerned with individual words, and occasionally letters, only when understanding fails" (p. 4). Smith admittedly favors a whole language approach to learning to read, but his insights warrant close attention even by those not sold on his particular approach.

It is interesting to note that although Smith appears to come down on phonics, he does not go to the extreme of throwing the baby out with the bathwater as do many whole language advocates. He argues that, given the nature of the phonics system and the limitations of human memory, readers should not be made to rely exclusively on

phonics rules for word identification. Phonics, however, along with a number of other word identification strategies, is useful as a supplementary method.

Understanding Reading is well laid out. In the Preface and Introduction, the author makes it clear where he is coming from and where he is going, a practice he continues throughout the various chapters. Helpful summaries are provided at the end of each chapter. The last third of the book consists of an extensive section of Notes which provide a deeper discussion of the material covered in each corresponding chapter, as well as sources of further information. Curiosity alone will probably have you flipping back and forth occasionally, so you may find it helpful to have a bookmark or two handy to mark your place in one section while you peruse a topic in the other.

In *Understanding Reading*, Frank Smith has combined quality research with clarity of style to present a thought-provoking and insightful book on reading and learning to read. Smith himself admits that other perspectives are possible. Nevertheless, anyone involved in teaching literacy would find the book worth their while to read. The best indicator of a book's worth, however, is not merely its capacity for mental stimulation but its ability to stimulate physical response.

Literacy: Reading the word and the world. By Paulo Freire and Donaldo Macedo. South Hadley, MA: Bergin and Farvey Publishers, 1987. Pp. 184. Paper $14.95.

Reviewed by Joseph Hoover

Reading Freire and Macedo was like finding a chalice in the basement. If one does not know that the tarnish rubs off, one might throw the beautiful chalice away.

Liberation, *social empowerment*, *comrade*, *revolution*, *class struggle*, *Marx*, *radical pedagogy*, *praxis*. These are words and phrases that tarnish Freire's ideas for literacy in the minds of those with a capitalistic conservative background. As a consequence, some reject Freire's message before it is heard. This kind of pre-critical judgment is unfortunate, for Freire's theoretical perspective of literacy can benefit literacy programs in terms of motivating potential readers.

Freire pointed out that adult literacy is more than the technical skills of reading books and writing letters. Literacy includes *reading*

(understanding) and *writing* (effecting) the world (one's environment). Some educators are *naive* at this point. They believe that the mere written word can give "sight" to the "blind" illiterate patient. Educators with "the critical practice of understanding literacy," however, view the students as subjects who can act and change their world. They give students the knowledge that they can *read* and have something to *write* about. Therefore, adult literacy, rightly understood, cannot be politically neutral. It is emancipatory.

The renowned Brazilian educator enters a dialogue with Donaldo Macedo. They converse about literacy, in the broad sense that Freire defines it, as a theoretical discourse (the communication of world-view). "Literacy programs," says Freire in response to Macedo's question about simultaneous discourses, "generally give people access to a predetermined and preestablished discourse while silencing their own voices, which should be amplified in the reinvention of the new society I am dreaming of." Freire dreams of a truly pluralistic society. In such a society a literacy program must be the discourse of the people in their mother tongue.

The dialogue between Macedo and Freire was a good way of presenting the latter's ideas of literacy, particularly since he so strongly believes in enlisting the students themselves as agents in their own learning, thus legitimizing a "plurality of voices" for a more democratic society. I was disappointed, however, that though the material was presented by two people, it expressed only one view. An exchange between Freire and someone competent in another theory would have been a method of teaching the ideas of emancipatory literacy, which is more consistent with Freire's theoretical views.

If you are a literacy worker in an area where the majority of the people have no motive for reading, then you should read this book. It's not a shabby, worthless cup. Polish it!

Living between the lines. By Lucy McCormick Calkins with Shelley Harwayne. Portsmouth, NH: Heinemann Educational Books, 1991. Pp. xiv, 315. Paper $19.50.

Reviewed by Carole Hoover

If your writing is in need of some inspiration, or you need some ideas on how to encourage others to write, this is the book for you. *Living Between the Lines* focuses on writing as a result of living. This

is not just another "how-to" book. Lucy McCormick Calkins does an excellent job of sharing people's lives and their writing.

The writing workshop is the setting for this book and is introduced in the first three chapters. The goal is for children to write well and live well. Teachers help the students bring their lives into their writing through sharing together and the use of notebooks. Writing is brought into the children's lives by immersing them in literature and exploring it together.

The notebook is an innovation for the writing workshop and is described in Chapters 3-6. The notebook goes beyond a simple journal about classroom activities. It is used to capture those fleeting moments that would be lost forever if we did not write them down. It is a tool for creating an awareness of our surroundings and for reflecting on our lives. Students are encouraged to carry the notebook with them everywhere.

The remainder of the book expands upon the use of the notebook. For example, Chapter 11 tells how the notebook serves as a springboard into the writing of picture books. Chapter 18 explains how children need opportunities to play with language without the pressure to produce a story. The notebook provides this opportunity.

Throughout the book Calkins emphasizes that the teacher needs to have first-hand experience with the notebook. She records bits and pieces of her life and reflects on her entries. She confers with her peers and further develops those entries which are most promising. Through this process the teacher gains insights into writing which are shared with the students. The desire is to go beyond the teaching of the mechanics of writing. Children need to learn how to reflect on their writing and internalize the process of evaluation.

The specific methods in this book may be difficult to apply in pre-literate societies, but the principles are applicable anywhere. Calkins stresses that writing is a reflection of our lives. People write about the things which are important to them. Our challenge is to help people discover where writing fits into their lives.

Living Between the Lines convinced me of the benefits of the notebook. It is written specifically for teachers, but parents who are involved in their children's education will find it insightful. I believe anyone interested in writing would find something of benefit in this book.

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Teaching students to read through their individual learning styles. By Marie Carbo, Rita Dunn, and Kenneth Dunn. Englewood Cliffs, NJ: Prentice Hall, 1986. Pp. xii, 307. Hard cover $37.00.

Reviewed by Diane Stocksdale

"To teachers everywhere who give students the greatest gift of learning—the ability to read." Thus reads the dedication to this book. This attractive book is interesting and packed full of helpful information and practical ideas for those who teach readers of all ages. The photos, charts, figures, and diagrams throughout this book quickly catch the reader's eye. It looks exciting and fun.

For years teachers have been searching for the best method of reading instruction, experimenting with nearly every method from phonics to whole language. Some students excel in each method, and some perform poorly. In this book the authors state, "There is no best way [to teach students to read]; there are many different approaches . . . Each youngster learns differently from every other one." Finding the match between learning style and method determines who learns.

The approach presented in this book is also very useful in working with those who are commonly referred to as learning disabled. "In our view," the authors say, "there are very few *learning disabled* children. Aside from actual physical or genetic damage . . . We believe that *Learning Different* should be substituted for the LD label. We all have learning differences—not learning disabilities."

The first four chapters deal with diagnosing reading problems, discovering the learning and reading styles of each individual student, and matching reading methods to those individual styles and perceptual strengths. Through this matching of reading methods to the individual's perceptual strengths, the fluency of the reader can be increased, and reading difficulties can be overcome.

Beginning in Chapter 5 the teacher finds step-by-step how-to methods and plans for selecting, adapting, preparing, and using reading materials that match each reading style. In this part of the book, the teacher discovers numerous tried and tested materials that can be immediately adapted and used in the classroom.

Two of the appendices describe how to use and score the Learning Style Inventory (LSI) and the Reading Style Inventory (RSI). It's through these well-tested inventories that the teacher is able to

determine individual reading styles and prescribe the methods to be used by individuals in learning to read.

The greatest strength of this book lies in its step-by-step explanations for everything: administering the inventories, prescribing instructional methods, grouping students, setting up the room, making materials, and using those methods and materials. This book would be a great asset for any reading teacher at any level. Though the book focuses on younger learners, some of the ideas may also be adapted and used for adult literacy students.

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236
U.S.A.

Note for contributors: Readers are invited to submit letters of comment and publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 West Camp Wisdom Road, Dallas, Texas 75236.

Computer media: Contributors are encouraged to submit copies of their manuscripts on computer media (MS-DOS or MAC format) along with a paper copy of the manuscript.

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[1]Most of the articles under the **primer** topics are applications of the Gudschinsky Method. Articles under this topic often compare the Gudschinsky Method with other methods.

[2]There are two Issues No. 44. One contains articles and the other contains an index supplement.

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[3]Many of these articles contain speculative thinking about adult literacy programs.

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[4]Case studies include a wide range of topics.

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[1]The term General can mean (1) written in the context of a specific continent or country, (2) referring to languages in a country in general, or (3) brief mention made of several languages.

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NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Inquiries, comments, or manuscripts for publication may be addressed to the editor at: 7500 W. Camp Wisdom Road, Dallas, Texas 75236. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236
U.S.A.

Note for contributors: Readers are invited to submit letters of comment and publishable materials to the Editor of Notes on Literacy, Summer Institute of Linguistics, Inc., 7500 West Camp Wisdom Road, Dallas, Texas 75236.

Computer media: Contributors are encouraged to submit copies of their manuscripts on computer media (MS-DOS or MAC format) along with a paper copy of the manuscript.

ISSN 0737-6707

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A WHOLE LANGUAGE APPROACH TO TRANSITION LITERACY—A PERUVIAN QUECHUA TRIAL

LINDA ORR EASTHOUSE

Linda Easthouse and her husband, Randy, are members of SIL from Canada working as literacy specialists in Peru. Most of their work has concentrated on the dialect of Quechua known as South Conchucos Quechua. They have pursued a moderate whole language philosophy seeking to integrate bottom—up skills into meaningful text for global learners.

Outline

1. **Introduction**
2. **Literacy and the Peruvian Quechua**
3. **The Whole Language approach**
4. **Review of other Whole Language experiments**
5. **A proposal for South Conchucos**
6. **Conclusions**

1. Introduction

This paper is an effort to explore the research and apply the principles of Whole Language reading to the realities of literacy in a Quechua-speaking mountain area of Peru. It will focus specifically on transitional approaches for readers who have had some exposure to literacy skills in Spanish. The paper will not attempt to address the needs of the completely monolingual illiterate, though we now have some ideas as to how that sector might be approached as well.

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2. Literacy and the Peruvian Quechua

2.1 The Quechua people of Peru

The Quechua people of Peru—numbering ten to twelve million—love and use their language(s) in most familiar contexts. However, efforts to develop literacy and/or education programs based on Quechua have generally met with little success.

Why is it that Quechua literacy appears to be so difficult? After 20 years of good but sporadic attempts in various dialect areas, very few programs have really taken hold and produced a literate community. Granted, the conditions are difficult. Four hundred and fifty years of cultural domination have undermined much of the Quechua people's motivation to read in their own language. Poverty and subsistence farming leave little time for study or pleasure reading. Furthermore, the dearth of adequate reading materials in Quechua complicates the picture while persistent and emotive debates about orthography issues make it equally difficult to produce literature.

2.2 Educational policy

The current government school system in Spanish has had some success in producing Quechuas who are literate in Spanish. Many of these, however, have in the process lost their rural Quechua culture and learned to belittle their own Quechua language. In the rural communities of South Conchucos, many students who enter a Spanish first grade classroom are monolingual in Quechua. For these the dropout rate before grade four exceeds 50%. By grade six (end of primary school) another 20% leave school. Less than 10% will complete high school (personal communication from Education office—Huari, Ancash). In the towns the numbers improve somewhat, but at even greater expense to Quechuan language and culture.

To counter some of these tendencies, the Ministry of Education is seeking to develop strategies for the Quechua areas. However, this effort is still in its infancy and it is difficult to predict how it might do. There has been some resistance to the idea of bilingual education on the part of Quechua parents because of the perceived advantage of Spanish as the language of economic advancement.

The multi-million dollar, ten year Puno Project sponsored by the German government in southern Peru has been abandoned as unfeasible,

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largely due to parental resistance and a lack of government and community support.

Limited economic resources for school districts means a lack of even a minimum supply of books and materials. Together with poorly trained, underpaid teachers lacking enthusiasm, it is evident that the prospects for significant changes or improvements in the existing system are not good.

There have been various SIL attempts to produce Quechua primers such as the Waran Waran series from the Huánuco area and the Allichu primer (1983) in Huaraz, but these have not been used extensively. They have not produced significant numbers of literates. The Sacred Heart Women's University, in conjunction with the Ancash Quechua Academy, has also adapted primers from the southern dialects and produced a nice children's reader. These, too, have met with a similar lack of enthusiasm.

2.3 Linguistic difficulties within Quechua

Another stumbling block appears to be the language itself. Quechua is a family of agglutinating languages which features verbs with up to 15 suffixes per word (4.1 suffixes per average verb) in the South Conchucos dialect (Easthouse: unpublished calculations for South Conchucos). The complex linguistic structure of the language makes Quechua challenging for the reader. There has been much debate about the orthography, and the decision to use certain sound representations is not well motivated linguistically. There needs to be more study of the use of diaeresis for vowel length as well as the inter-relation of stress and length. It may be that not as much needs to be written as linguists have previously assumed. Many of the languages are apparently undergoing a loss of inherent length. The day may come, when length will not need to be specified in the central Peruvian dialects (D. Weber, personal conversation).

The lack of a "standard" Quechua—a functional equivalent to "High German"—that is accepted by the majority of Quechua speakers means that written materials are, at the very best, of value only within the region for which they are produced.

The need to produce multiple versions of materials implies, of course, greater costs for materials, for teacher training, and for supervisory structures for each local area.

The government at one point attempted to impose the Cuzco dialect as a standard Quechua but was not successful because of the magnitude

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of differences between the southern (standard—Quechua A group according to Torero) and central dialects (Quechua B group). Central speakers cannot understand southern speakers so that, in effect, the standard from Cuzco became another second language to the central areas competing with Spanish in its own sociolinguistic contexts.

Yet, there are bright spots. After 20 years since the bilingual education project ceased in Ayacucho, we find thousands of literate Quechuas seeking copies of the newly published Bible (Sept. 1987) and other religious materials. It is apparent that the highest achievement has been among religious groups whose apparent motivation was to be able to read Scripture (Whalin, 1993:170). The number of Quechuas, in the Ayacucho area, able to read exceeds the most optimistic expectations based on the history of the project.

2.4 Political insecurity

The influence of the well-publicized anti-government movement known as the Sendero Luminoso is still felt in much of the Andean area. National and expatriate educators and field workers are not able to move freely in order to plan programs, distribute materials, hold training sessions, etc. The unstable political situation continues to restrict classes or other community meetings in some rural areas.

Any kind of a literacy program developed in this context must consider such limitations. Accordingly, we envision learning taking place in a small group (family unit, church group, etc.) with a self-teaching cassette packet that can be played over a number of times. After the material in this packet has been mastered, the packet can be exchanged for another of the same level or a progressively more difficult packet of reading materials.

3. The Whole Language approach

3.1 Whole Language: a definition

The Whole Language approach is, in a sense, a methodology as well as a theory. The impetus for whole language reading has come from the perceived failure—in at least some cases—to produce successful readers using traditional word attack-based approaches. In searching for solutions, researchers and classroom teachers began to reassess the practice of teaching reading, and found that, in some situations, little meaningful reading was done by the learner in the process of learning to

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read. Some compared the process to learning to drive. The learner can be given all of the rules and know all the things one needs to do to drive. However, it is not until the student gets behind the wheel and actually starts to drive that he really learns to drive. Real stories, it was argued, are like real cars; you only learn by doing.

The whole language approach is in essence a return to literature. Reading is learned by listening and observing others reading, by practice—reading real stories by learning letter and world attack skills in context, and by participating in writing meaningful pieces that are read to or by someone else. Whole Language proponents want to immerse their students in the world of print. Furthermore, all contact with print should be meaningful. From the first word to the last, the reading process ought to communicate something. It should provide ready movement between the written page and the reader's world.

Numerous studies have pointed out the gains made by children who are read to regularly in contrast to the handicap of children who have not been exposed to such immersion in print. Researchers have noted how frequently children have taught themselves to read while listening to older siblings or "playing" with recorded storybooks. This is not to endorse much of the "child-centered" educational philosophy that has become associated with Whole Language, rather to lift the reading element out of the backdrop.

The whole "cognitive" academic discipline has emerged that seeks to explain how meaning is derived from print. The overwhelming evidence is that people, children and adults, learn to read by "guided" reading.

3.2 Guided Reading

In Whole Language, teachers are an important part of the learning process but they do different things. The teacher's role is to guide the reader and to help him/her gain meaning as well as processing skills. Thinking out loud has proved to be an effective modeling procedure showing what good readers do in the process of reading.

Drawing from the work in second language acquisition, teachers have come to see the importance of hearing before producing and understanding before correcting. In many ways, it appears that the process of learning to read is similar to that of mastering a second language. It is learning a new language—the language of print.

3.3 Whole Language: key components

Theory about teaching reading can be generally divided into two schools of thought (Evans and Carr, 1985; Fox 1987). The first, focuses on the instructional techniques which assume that reading is the, "consequence of mastery of a series of discrete tasks" (Weir, 1989:456). Phonics, and basal readers which focus attention on letters and individual sounds are examples of this approach. The second category, "is premised on the belief that during literacy acquisition, all forms of language competence (reading, writing, listening, speaking) develop concurrently. Understandings about print are extrapolated by children across experiences that permit meaningful interaction with oral and printed language" (Weir, 1989:456). Language Experience, Big Books, and Process Writing are examples of this approach. These techniques are often referred to as "holistic" or "global".

Whole Language is part of this second family of methodologies. It seeks to create a literate environment and to help the learner take advantage of that environment. The key components of whole language are: (1) a print rich environment, (2) a holistic approach to language (speaking, reading, writing, listening), (3) an emphasis on the process and purpose of print, (4) extended interaction with print and oral language, (5) effective models of the cognitive process, and (6) the use of natural text (stories, poetry, dialogue, etc.).

In The Reading Teacher, March 1989, Michael Tunnel and James Jacobs (Using "real" books, 470-477) present an excellent summary of the current research and extrapolate a detailed list of the key elements of Whole Language instruction. The following list is a summary of their review. (The explanations of each point are mine.)

3.3.1 Premises learned from "natural readers". Whole Language advocates view the process of learning to read like the process of learning to speak or learning a new language. Children who have taught themselves to read with no formal instruction, have much to teach in relation to what is the process of learning to read. Tunnel and Jacobs cite several studies that have reinforced the intuition that early reading in the home and extended interaction with print lead to strong readers. "Immersion in natural text at an early age has the same effect on reading as immersion in aural and spoken language has on speech" (Tunnel and Jacobs, 1989:474).

3.3.2 Use of Natural Text. In all of the research literature about cognitive processing and reading, it has become clear that superior progress is made when the literature used is uncontrolled, natural

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language. Language that is controlled tends to create stories that lack contextual clues, grammatical function clues, predictability, and style. Children find controlled literature more difficult to read than uncontrolled natural language (Goodman 1988).

3.3.3 Neurological impress method. This is often referred to as repeated reading. Carol Chomsky's 1978 study of "reading" with a tape recorder demonstrated significant gains among stalled readers. The original design called for the introduction of analytical lessons tied to each story and to be done after the story had been mastered with the tape. Her results indicated that the gains were made whether or not the analytical lessons were completed. The children learned to read by developing the cognitive processes necessary through the repeated reading of the same story until they could read it fluently.

Big books, reading pairs, and cassette books all accomplish the same process.

3.3.4 Reading aloud. Being read to is critical to learning to read. Learners need to hear what good reading sounds like. This is a companion skill to neurological impress and modeling. It is interesting to note how many reading programs assume reading but do not actually include reading anything more than a lesson plan and an occasional simple sentence to the learners. This is especially problematic for adults who can understand far more than they can produce (from the printed page) and need the stimulation and encouragement of models (natural text) that are appropriate to their lives.

3.3.5 Sustained silent reading. New readers need time to be alone, uninterrupted, with books. The more exposure to the printed page, the better the reader becomes. Anderson et al in Becoming a Nation of Readers (1985:119) say that the time children spend in independent reading, "is associated with gains in reading achievement." Rereading is as effective and often more effective than something new (Dowhower 1989).

3.3.6 Teacher modeling. Learners need to see examples of successful reading in a variety of contexts. Motivation to read is provided by seeing someone else successfully use reading for personal advantage whether for pleasure or for business.

3.3.7 Emphasis on changing attitudes. Students who learn to read by practicing reading, love to read. Wide and consistent exposure to the written page brings an appreciation and love for reading. This may be a critical factor in the Quechua situation. Books, lots of books, in their language gives Quechua prestige. Seeing others read, enjoy, and value their literature and language counteracts one of the

devastating factors that has constrained the development of Quechua literacy up till now.

3.3.8 Self selection of reading materials. Tunnel and Jacobs say, "Every study examined had a time when students at every age level were encouraged to find and read books of their own choosing" (p.476). This presupposes the availability of books, and encourages the production of a wide variety of local books as part of the program.

3.3.9 Meaning oriented with skills taught in context. Letter lessons and analytical skills have a critical place in whole language but they are drawn out of the material being read and are quickly moved back into the "real" reading for practice (Chomsky 1978, Eldredge 1986, Holdaway 1979). Skills come as a result of exposure to text. It is a consolidation process that helps the learner formulate premises and word attack skills based on familiar material.

3.3.10 Process writing and other output skills. Because the emphasis is on integrated skills, reading naturally leads to and comes from writing. Chomsky (1978) states that students who pursued vigorous writing progressed the best, both in writing and reading. Some kind of output needs to accompany reading to consolidate the gains made. Writers' workshops, dictated stories, and creative writing exercises need to be incorporated into reading lessons.

3.4 The Role of Repeated Reading

Particular elements of Whole Language theory seem highly relevant to the Quechua situation. I turn now to a consideration of those elements to show their possible role in a transition literacy program for Quechua.

The technique of repeated reading has particular significance for adult literacy in the Quechua context. Repeated readings of natural text is a device for developing as well as recovering skills that have been lost through years of non-reading. In many cases, particularly with adults who may have completed one or two years of school as much as twenty or thirty years ago, reading skills are rusty, if not lost altogether. They lack confidence in their ability to read. In many cases the mere knowledge that they don't have to read a text perfectly the first time gives the new reader the courage to give it a try.

The research that has focused on the effects of repeated reading (RR) on oral reading comprehension and fluency is most interesting. The influence of reading in Spanish, which is often simply phonetic decoding with complete loss of meaning, has influenced the Quechua

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learner. The result has typically been a stilted and artificial reading style which falsely models the process of "true reading". The Quechua must often master the notion that reading is for meaning as well as learning to read printed text in a manner which mimics the oral production of similar material.

3.5 Rereading increases retention

Rereading is a strategy which produces a marked increase in factual retention. The whole process of comprehension and retention is benefited. For new readers, the first time through a passage requires such concentration on the reading process that the reader doesn't catch much of the content. Rereading enables them to focus on other levels of mental processing and sort out the content. The time taken to focus on content the second or third pass through improves retention.

Levy et al (1986) claim that rereading increases processing speed and allows students to detect errors even as they gain in speed and familiarity with the material. Other studies show gains in the retention of structural details such as main ideas and themes. Often the first reading is mechanical but subsequent readings enable the reader to assimilate and synthesize the material (Bromage and Mayer, 1986).

"Comprehension takes time, and to expect complete understanding after one oral reading is not appropriate" (Dowhower 1989). Hoskisson (1979) says that "natural readers solve the problem of learning to read as they construct their knowledge of written language." He suggests that there is no such thing as a hierarchy of skills that needs to be mastered, but rather that the learner will assimilate that which his cognitive processing level is able to accommodate with each pass through the material.

In language acquisition, the incremental approach to vocabulary portrays the point well. On the first pass through a list or text, the learner picks up certain new words, but as he gains understanding and cognitive pegs to hang the new knowledge on, each new pass brings more words under the control of the language learner. Repeated readings function in similar manner for the control and retention of the content of a text.

Repeated readings can be an oral read—along with a tape or partner providing a model which is referred to as assisted repeated reading. Repeated readings can also be accomplished by means of independent practice on a text that has not been previously modeled, referred to as unassisted repeated reading. "In either case, students reread a

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meaningful passage until oral production is fluid, flowing, and facile" (Dowhower, 1989:504). Practicing one passage until a set speed rate and fluidity is achieved leads to the same increase in speed and fluidity in new passages. Dowhower claims that assisted and unassisted rereading procedures are equally effective for speed and accuracy.

Dowhower (1987) also found that practicing a series of passages of the same reading level seems to be more effective than one passage in isolation or a rapidly graded series of readings. When good control of that level is achieved, the learner can then proceed to a more difficult level of text. Each learner will determine his own need in terms of how many times he needs to listen to a particular text and how many texts of that level he needs to read to gain fluidity on the first reading of new texts of that same level.

The same study also suggests that short passages or stories of 50-300 words are best. In order to determine his/her level, the learner should recognize 85% of the words after the first reading, before beginning to practice read. If word recognition is much below that, the story or passage is too difficult. Significantly, based on this criteria, nearly 100% of the Quechua target audience would be considered illiterate for even the simplest Spanish materials.

In summary, Whole Language teaching incorporates a variety of methods while focusing on the use of literature. Whole Language teaching does not claim that there is no place for the skill lesson and for worksheets. Rather, it asserts that these elements play a significantly different role in the learning process. Whole Language is literature driven rather than textbook driven and, therefore, less controlled and measurable along the way. However, the end results have been significantly better in some contexts than the traditional controlled vocabulary and/or basal textbook programs.

4. Review of other Whole Language experiments

In this section, I wish to review programs of non-English adult literacy where some or all of the tenets of Whole Language have been incorporated into the program. Some of these programs incorporated Whole Language elements by design whereas in other cases it happened by trial-and-error without a great deal of theory. In either case, I believe we can point to such programs as providing evidence for the validity of the Whole Language approach

Clearly, Whole Language theory has been primarily developed with and for children in a classroom setting in an English speaking environment. The following short case studies, however, not only shed light on the use of Whole Language with adult and non-traditional education programs, but also incorporate languages other than English.

Raymond Gordon (1989) reports good results with a methodology he developed and called—A Group Dynamic Method of Learning to Read. He has used it with bilingual Crow speakers in Montana. Each student had some basic reading ability in English so, in effect, it was a transitional program to teach mother-tongue reading skills to those who already possessed at least a minimal reading skill in a second language.

The key components in Gordon's program were repeated reading, echo reading, modeling, and skill teaching of points that presented difficulties in the repeated readings.

> "In a matter of three months—once a week sessions—most of the participants became fully independent skilled readers. This was in contrast to many months of formalized classroom instruction as part of a bilingual education teacher-aide program that, in general, failed to produce independent, confident readers" (Gordon, 1989:29).

A second program of interest took place in Irian Jaya under the Program Kerjasama Universitas Cenderawasih. Delle Matthews (1989) has developed a basic lesson plan for semiliterates which focuses on moving from the barely reading stage to the reading to learn stage.

It has long been recognized in third-world literacy that the first stage of learning to read is not sufficient. Unless a new reader gains fluency through practice he soon reverts to illiteracy. The second stage is referred to as reading to learn and it is at this stage that a learner is able to read, comprehend, and assimilate material beyond his own local cultural reference (MacDonald, 1983). This basis led to the development of the Matthews program which concentrated on comprehensive and easy-to-adapt lesson plans to guide new readers.

The lesson plan can be incorporated into any one of the various languages of Irian Jaya and can have virtually any story or passage plugged in, making it flexible yet easy for local teachers to master. It focuses on cognitive development and comprehension, but provides modeled reading and plenty of repeated listening and production of the story as each student reads out loud.

A final program of significance to the Quechua situation has been developed in literacy work with the Cheyenne. Hazel Shorey calls it the Passive Literacy method. "...Cheyennes learn to read best, and enjoy it most, when the reading process is not the focus of the session" (Shorey, 1989:41).

Generally the material is read or sung aloud or from tape while the learner listens and follows along in his own copy. No pressure is put on the learner to read out loud until he feels comfortable and able to do so. Several advantages noted are that it takes advantage of available literature, a native speaker needs little special training in order to teach someone else, and it fits into the cultural patterns.

5. A Proposal for South Conchucos Quechua

5.1 Methodology and Theoretical Basis

Taking the principles and knowledge gained in the Whole Language process, we have developed a methodology for transition skills aimed at the already semiliterate Spanish reader whose mother tongue is Quechua. (See Appendix A.)

We believe a person learns to read by reading. Exposure to a wide variety of good literature in the target language along with an opportunity to interact with the materials and draw out the necessary skills is critical to successful and continued reading. This presupposes the production of books containing poetry, expository texts, narrative texts, fables, legends, traditional folktales, informational texts, etc. An exposure to all the Quechua genres and a variety of styles constitutes sufficient exposure. Over the long run this will sharpen reading skills and establish the reading habit through practice.

We believe that reading is a process of integrating new stimuli into the already existing knowledge and thought patterns. Reading is not just the exercise of the sum of all the right skills taught in the right order. Reading is a means to communicate, and carries all the elements of successful communication. Learning to read Quechua should be enjoyable and motivational for the Quechua speaker.

We believe that the current research around the world on thought processing (eg, Piaget, et al) and the process of reading (eg., F. Smith, et al) show that the basal reader approach with restricted vocabulary and grammatical structures has not always been successful in cross-cultural contexts.

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We believe that the text materials presented should be 'natural Quechua'. Stories should be culturally appropriate for the mountain communities. Therefore, it is not our aim to control the ordering or introduction of letters or vocabulary. Rather, the direction lies in providing reading stories which are socioculturally meaningful, along with successful practice readings and an introduction of the letters that differ from Spanish. The basic ability to decode the Spanish letters is assumed through the definition of the target audience as those who already have primitive Spanish skills. The texts used are "graded" in the sense that the early stories use simple sentence structure and do not exceed two sentences of large print per page. See Appendix B for a statement of the levels.

We believe that in order to achieve a "critical mass" of readers (and eventually writers) along with sufficient literature to sustain community-wide literacy, we must concentrate on specific group(s) within the culture. Specifically, we propose to focus on those groups which are moving along the path to literacy and are most likely to draw others with them due to their social prestige as well as their active and personal encouragement. The bilingual native Quechua speaker who is fully literate in Spanish is the easiest to bring to full literacy in Quechua. The already available transition materials are sufficient in most cases for this group. The large group of semiliterate bilinguals or semi-bilinguals is the second category that could move fairly quickly into Quechua literacy and is the focus of this project. It is predicted that this group will also have the highest motivation to become literate in Quechua because of their closer ties to the Quechua community and their lack of skills in Spanish.

5.1.1 Target Audience. We have therefore chosen that group of people, ages 12-55, who have completed at least grade 2 but not more than grade 7 in the government school system in Spanish and have minimal decoding and word attack skills in Spanish. They should be able to read simple narrative texts in Spanish dealing with known subjects with reasonable comprehension. These people fit into the definition used by adult education specialists as *semiliterate* in Spanish. They may even handle written Spanish sufficiently well to cope with the basic requirements of living in a Spanish dominated country but would not be able to read or write formal Spanish (business letters, official documents, newspaper, etc.). They must be native speakers of Quechua.

The target audience are primarily those that will start at Level One. For those who have better Spanish skills or who have had extensive experience and training through a translation or church program, it may be possible to start at Level Two or even Level Three. If the person in

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question is able to read a book for that level with reasonable fluency and comprehension without listening to the tape, he should be encouraged to move to the next level for active learning. He may benefit from passive listening at the lower level and could aid others who need the lower level materials by providing a good reading model.

A feasible method of entry level placement is an informal assessment of ability to read the booklets of a given level without listening to the tape. For those who are marginal (between one level and the next), they should be encouraged to complete at least one or two stories of the lower level to reinforce their skills and then move up. Quick learners will only need to listen to each tape once while slower learners or those with less skills will need to listen to each tape 4-6 times.

The members of the target audience chosen to distribute the packets (books and cassette tape) and check up on the group later must be proven, respected community leaders. In many cases in the central dialect areas, that person will be the lay church leader. Others in the community who are well-respected will also be encouraged to use the packets in their family or community groups.

5.1.2 Literature. The literature chosen for this project reflects the community interest in Bible materials as well as local stories about known people and customs. These materials are written in a simple format that tries to restrict the number of subordinate clauses but does not restrict word choice. Word and sentence length were not determining factors. No effort was made to restrict which letters are used in any given lesson. Careful attention was given to linkers and discourse features to insure natural fluid story lines with good Quechua style. Level One contains very simple stories, while Level Two and Level Three will move quickly to the full range of sentence types and discourse styles. It is hoped that by the time a person has worked through the full program, they will be able to read anything written in their Quechua, including translated materials such as Scripture, with good comprehension.

Because this is a literature-based program, the emphasis is on natural text material. The letter lesson follows the mastery of the story as a reinforcement of what was picked up globally in the repeated readings of the text. The process of analytical discovery takes place in the context of the already learned and comfortable story. The letter lesson becomes, then, a conclusion drawn from the lesson rather than a skill necessary to attack the lesson and enjoy the story.

5.1.3 Fluency. A reader will be considered fluent for any given lesson when he can read with natural intonation, speed, and expression

the material that has been presented in that lesson. He will be able to read it a week later with little hesitation and will be motivated by his current fluency to proceed to the next level of difficulty. It is understood that with the early, easier stories, fluency may be reached by memorization of the story, but that is an acceptable first step in a literature-based reading program.

5.1.4 Comprehension. Comprehension is an integral part of the process. Prior to listening to the story the first time, the tape asks three or four preview or prediction questions in order to focus the listeners' thoughts on the key parts of the story. These questions are not meant to be answered but to orient the listener to what he will hear. After the first listening, the tape asks the participant three or four comprehension questions and then tells them to turn off the tape recorder and discuss these questions. The discussion and repetition of the focus questions with repeated listenings will further the comprehension process.

5.1.5 Repeated Reading. Repetition is also an important feature of the methodology. Participants are asked to repeat any given story until they feel comfortable and can read the story fluently. It is assumed that some in the family group will be ready for the next story after just one listening session while others may want to repeat the process five or six times before proceeding to the next story. This is the reason for lending packets for one week periods. We hope that those who need the practice will listen to the tape once a day.

5.2 Cultural acceptability

Story telling and listening are traditional activities among the Quechua. In many households this traditionally took place snuggled in bed in the early dark. However, with the advent of kerosene lanterns, candles, tape recorders, and radios, families stay up later and sit around listening to the news or music. Market day, harvest times, fiestas, and churches bring together groups to visit and to tell stories.

The "moraleja" genre (stories with a clearly defined cultural moral) is highly developed and used by parents to transmit values to their children. There are many positive stories modeling what should be done as well as negative stories warning against what shouldn't be done. Some of these are being incorporated into the taped books.

Helping each other and prompting or shadow reading for a slow reader are natural skills which surface with no outside instruction. Though more study needs to be done, it is obvious that there is no one culturally enforced learning style. However, there is a notable tendency,

more pronounced among women (probably due to less exposure to the analytical Spanish school system), towards a global learning style characterized by modeling and hands-on practice to attain new skills. The process of listening to a tape and then reading along can be repeated as often as needed to provide the practice before a reader is expected to produce on his/her own. Because of the well established oral tradition of the Quechua, repeated readings are not seen as boring.

Quechuas tend to work by family consensus rather than following a strong leader/teacher. The techniques of paired reading, choral reading, and cassette as "teacher," are well received. Loyalties and a willingness to be vulnerable still fall very much within family units even though they live in communities. Open classes that mix families and expect participation have proven difficult in agriculture, health, and other community development projects in the region. The one exception is within a tight-knit evangelical church where the unifying force is their common faith.

Most Quechuas have experienced failure to one degree or another in learning to read in Spanish. Therefore the self-pacing program is non-threatening. The option of being able to listen various times before producing enables the learner to save face and to continue learning. An unfortunate fact of the formal education system is that it produces "readers" that don't expect to understand anything from what is read. "Literate" is therefore defined by the education establishment as the ability to decode the letters of the alphabet and write one's own name (conversation with various teachers and educational administrators). The fact that what is being decoded is in a language which the reader doesn't control is not considered important. Therefore, the proposed program will focus on comprehension, oral participation and discussion to overcome the ingrained understanding that "reading" does not carry any communication value.

The Quechua's event-driven lifestyle follows the agricultural cycle and requires that people move from their homes to distant fields and pastures. A regular class schedule is therefore difficult if not impossible to maintain. A cassette-based program allows each group/family to proceed at its own pace as farm and home duties allow. As well it makes the teacher "portable" when the family moves and facilitates the catch-up necessary for those who miss any given session.

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5.3 An Intergenerational Benefit

Since one of the major stumbling blocks to successful bilingual education in Quechua areas has been parental resistance, we have been searching for a way to involve parents and children together. Barriers to past programs have been:

- inability on the part of illiterate parents to help and encourage their children in either Spanish or Quechua reading.
- lack of normal reading readiness and pre-reading activities at home
- lack of modeling of the value and purpose of reading
- lack of community and parental acceptance, respect for and support of outside teachers assigned to the local school

With these factors in mind, the program is aimed primarily at the mother and child together with over-the-shoulder use by fathers and young men. It is expected that men will participate passively at the lower levels since their level of education is generally higher. However, arriving at the more advanced levels should then challenge the men to keep up with the women and children.

We hope that even grandmothers and older adults associated with the household or small group will participate passively, though we have no expectation that they will master reading. Several grandmothers have already proven good motivators in encouraging young people to be involved. They enjoy listening to the stories and then proceed the next day to tell all the other families and brag about how well their grandchildren are learning!

One of the goals of the program is to help parents overcome their fear of the "unknownness" of school and reading. The cassette "teacher" that speaks Quechua is non-threatening and a novelty that they seem to enjoy. It has provided a unifying force to help stem the generation gap between "illiterate/peasant" parents and their "Spanish-schooled" children by providing a learning activity that puts them on an equal footing and allows them to learn together.

An additional benefit has been a somewhat increased acceptance on the parents' part of Quechua use in the schools. Once they begin to understand that education in Quechua is possible, they are less resistant to their children learning Quechua in a bilingual or parallel language program. Because they feel less "ignorant", they feel more confident in

approaching the primary teacher and being more involved in their children's education.

5.4 Recommendations for the program

In the process of trials in a dialect of Huánuco and later when establishing the program in South Conchucos, we have further defined the practical application of Whole Language theory in the context of cassette, based self, teaching lessons. The following factors need to be taken into account in program planning and implementation.

5.4.1 There needs to be a continuous source of new, graded materials. Some learners may need as many as 20 titles at each level (Chomsky 1978) while others will progress well with five or six titles.

5.4.2 Writing lessons need to be developed to go with the Level Two lessons. We would like to see, as well, even some elementary writing skills and dictation in Level One. However, the logistics of how to supply paper and pencil in the face of the extreme economic crisis encountered in the mountain areas has prevented development of this area of the program. Consumable books that provide the space to write are out of the question due to the necessity of sharing "loan" books for the classes. Even though each student is encouraged to buy a copy, it is realized that few families will be able to buy more than one copy, which will then be shared.

5.4.3 Constant monitoring and evaluation of new stories is required in order to handle unexpected difficulties. These then should have a lesson or explanation page prepared and added to the tape before general circulation.

5.4.4 The initial lessons need to be "alike" in the sense of level, style, cultural content, etc. to get the learner used to the system. Level Two and particularly Level Three need to use a variety of genres and writing styles while still retaining the graded reading level. Music and songs work exceptionally well.

5.4.5 Each tape needs to invite those who wish to read out loud to do so, and to reassure the others that they should wait until they have listened to the tape several more times if they feel hesitant.

5.4.6 The program could be expanded eventually to include the participation of monolingual non-literates by significantly

increasing the number of stories in the first level and introducing each letter in the same way that the non-Spanish letters are introduced. We are currently considering the feasibility of producing one book for each letter of the alphabet at Level One. Level Two books could carry grammatical function lessons to aid in developing automaticity in the decoding.

Level One lessons would carry an explanation of letter formation for those that don[]t know how to write the alphabet yet. Creative writing could be similarly introduced in Level Two.

5.4.7 The books must be available for sale, and preferably, the class packets would have 20 or more copies so that one is available to each person present.

5.4.8 The technical difficulties and price restrictions of hand-crank or solar cassette players is yet to be addressed. The cost, unavailability and misuse of batteries makes supplying them unfeasible as a long-range solution. The tapes should have the same thing on both sides so that those using crank or solar machines don[]t have to wind all the way through the second side to repeat the first lesson. In Cajamarca they will experiment with a bilingual lesson (teaching parts in Spanish with Quechua story) on one side plus the fully Quechua version of the same story on the other side.

In the past most families had at least one cassette and enough batteries to have made the program workable with no outside assistance. The economic downturn has made the purchase of batteries prohibitive to the target audience. Most families no longer have the resources to listen to even the radio news once a week let alone repeat a tape at will until it is mastered.

6. Conclusions

The results so far have been encouraging. We have not been able to publish books or produce tapes fast enough for the demand in the areas where we are providing cassette machines and/or batteries for the trials.

In one of the first trials with just rough photocopied mockups for books, we asked a neighbor to invite a few ladies from her family to listen. The first night we had six people including the two kids who took turns cranking the hand-crank tape deck. The next night eighteen turned up and by the end of the week there were forty ladies and a few

extra children crammed into the tiny room sharing the ten copies of the book.

One of the young ladies that attended one evening came out of curiosity and informed us at the outset that it was impossible to read Quechua. She was in the Spanish high school and read reasonably well in Spanish. She sat at the back and didn't need to share a book as she was just there to listen. Half way through the tape she borrowed her friend's book and by the end, she was one of the first to volunteer to read the book to the group. Upon leaving she asked to buy a book and wanted to know when the next one would be ready.

The men also had a trial class but their comments were, "This is too easy. When will you bring books for us? My wife could even learn to read with this."

In South Conchucos, the early books from Huánuco were adapted and two new local stories were included. After hearing one of the tapes in a demonstration hour during the teacher training course, one of the students came and bought a copy of the tape and 20 books and is now holding class in his tiny rural community. Another of the co-translators was so excited that he came up with a solution for the problem of the cost of the tapes. He owns a large two-cassette tape deck that makes good copies. He now takes a master tape with him when he goes to a village. He takes along his big tape deck and plays the tape. Anyone who brings him a blank tape, gets a free copy and then he sells the books to go with it.

The spread of the program was initially hampered by restrictions on publication in Quechua due to unresolved (until recently) orthography problems, mechanical difficulties in getting the tapes prepared and duplicated, the slowness in getting books through print shops, lack of personnel, and insufficient capital to pay for the initial expenses of printing and tape duplication. However, everywhere the program has been introduced, it has been well received and has produced new readers and increased interest in Quechua materials.

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Postscript

To date, three communities have used the program extensively and have produced a good core of readers in each community. Numerous other groups and individuals have acquired various packets but there is no controlled and accountable program in place.

We have also experimented with the religious education class in four classrooms of fifth and sixth graders. Instead of the tape, a trained promoter is following the program orally. It has been well received and to date 90 students have learned to read fluently. This contact has led to the request by the four schools to train other teachers in their schools to conduct the course. The promoter will be starting in new schools this year.

One solution to the "power" problem has been to train volunteers and local leaders to orally lead a group through the questions and readings. They easily memorize the patter and seem naturally patient in guiding groups. Each leader has the tape to listen to, but doesn[]t necessarily use it in the class. So far, seven lay leaders from one town have been trained and are under the direction of the local priest.

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APPENDIX A

CHARACTERISTICS OF SEMILITERATES

Taken from Teaching Reading Fluency, Delie Mathews, Notes on Literacy 58, 1989. pp. 35-36.

1. They read slowly.
2. They read word-by-word (or syllable-by-syllable) and do not usually make natural phrase and clause breaks.
3. They sound out words they don[']t recognize syllable-by-syllable.
4. They don[']t always understand what they read.
5. They often correct themselves and repeat what they have just read.
6. They find reading difficult.
7. They prefer to read aloud and find it difficult to read silently. (People usually learn to read by reading aloud and then learn to read silently.) At a later stage, they may begin to find reading aloud difficult and must develop the art of oral reading or audience reading.
8. They have not developed the skill of purposeful reading and are not skilled in reading a variety of materials other than stories and simple cultural books.
9. Their comprehension skills of interpretation and application are not developed.

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APPENDIX B
SOME SUGGESTIONS ON "GRADED LEVELS" DEVELOPED BY TRAIL AND ERROR

Level 1

Text

- Simple stories, no complex sentences (few subordinate clauses) but not with restricted vocabulary or letter choice
- No more than 2 sentences per page.
- Large print (16-point)
- Highly cultural local content

Picture

- Very Important at this stage as clues to meaning of text
- One per page (large, but clear, not "busy")

Level 2

Text

- No more than 2 sentences per page.
- May have relative or adverbial clauses
- Medium print (12-point)
- Cultural stories, but may introduce ideas or things from other Quechua areas (eg., Story about going to the jungle or coast)

Picture

- Not quite as important, yet helps in comprehension and attractiveness (sale value!)
- One per page

Level 3

Text

- Three to five sentences per page

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- May be complex sentences
- Translated or more technical/informational topics (eg., Biblical passages, description of school activities, etc.)

Picture

- Interest generating; visual appeal
- Perhaps fancier cover
- One per page, though picture is smaller, due to text load per page

Level 4: "Free Reading"

That is, neither "class work nor homework assignments", but rather a time in which the reader can attack a "real story" representing ALL OF THE FLAVOR AND RICHNESS OF QUECHUA LITERATURE. Give them something to shoot for!! "Is Quechua literature really worth the effort to learn to read, or not?"

Text

- "Reading to learn" stage materials. Minimum of 50 sentences?

Picture

- One per 3-5 pages, with decent front cover. Visual appeal, white space, and layout are still important so as not to overwhelm new readers. Lots of illustrations and diagrams needed if it is informational or teaching a new skill, technique or idea.

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A PROPOSED MODEL OF SEMILITERACY IN HIGHLAND QUECHUA

Barbara Trudell

Barbara Trudell and her husband, Joel, have worked as literacy specialists with SIL since 1982. They formerly worked in Peru where Barbara served as branch literacy coordinator. Barbara is presently serving as the Africa Area Literacy Coordinatorin Nairobi, Kenya. In this article, Barbara demonstrates why a Whole Language approach was appropriate to the Quechua context.

Introduction

In the Peruvian highlands, the literacy of Quechuas is difficult to measure. No standard *reading books one, two or three* are available by which to gauge a Quechua's reading proficiency. Three factors help us analyze Quechua literacy: (1) the degree of bilingualism in Quechua and Spanish, (2) the quality of formal education, and (3) the ability to transfer reading skills from Spanish to Quechua. These factors help identify three levels of reading proficiency: illiterate, semiliterate, and literate.

The illiterate Quechua failed to learn to read because of monolingualism or lack of exposure to formal education. Many Quechuas have both disadvantages, especially women and those in rural areas. Few literacy programs have been carried out in Quechua, and few monolingual Quechuas are literate. Monolinguals have little access to formal schooling, and the lack of formal schooling keeps them in monolingualism and illiteracy. The transfer of reading skills from Spanish to Quechua is not an issue for illiterates.

Most Quechuas are semiliterate, unable to read for meaning in Quechua. The semiliterate Quechua speaks at least rudimentary Spanish. He had enough formal education to recognize letters, syllables, and perhaps words. The semiliterate lacks the skill necessary to read Spanish and Quechua with comprehension.

Gudschinsky's defines a literate person as one who can read and understand anything that he could understand were it spoken to him (Gudschinsky, 1973). This definition distinguishes between the semiliterate who cannot read because he cannot speak Spanish well enough and the semiliterate who is fluent in Spanish but never learned that reading conveys

meaning. The former comes from low Spanish proficiency and by negative experiences in school, such as poor teachers, absenteeism, social ridicule, or academic failure. The semiliterate's Spanish ability may increase with age without his level of literacy keeping pace.

The literate Quechua speaker is fluent in Spanish, and has received enough formal education to master the skill of reading. With few exceptions, Quechuas learn to read in a Spanish-speaking environment (e.g., a Peruvian state school). Since reading for meaning requires understanding of the Spanish text, the literate Quechua speaker must be bilingual and educated. The literate Quechua successfully masters transferring his reading skill in Spanish to reading in Quechua. Fully literate Quechuas are rare.

1. The Syllable Method

An aspect of education that contributes to reading difficulty is the reading method used in Spanish-speaking schools. They use a syllable-based method that focuses on decoding skills and memorization, with little attention to developing comprehension skills.

The syllable method of teaching reading concentrates on the analysis of words into their component syllables, memorization of syllable families, and synthesis of new words from known syllables. This method places strong emphasis on decoding skills, as opposed to comprehension skills. Support for a decoding emphasis in initial reading instruction is based mainly on the argument that an illiterate already knows his language and knows that it carries meaning. All he needs to learn in order to read well is how to break the code of written text; once he can decode the text, he draws on his knowledge of the language and of his world to understand what is written. Comprehension is thus automatic, and need not be emphasized heavily in class.

Spanish, by virtue of its simple syllable structure and relatively short words, lends itself well to a decoding approach. Ideally, a certain amount of instruction in comprehension skills is also incorporated into the instruction, since no developed method ignores either decoding or comprehension skills completely. Difficulty does arise in many rural schools, in that the comprehension component is often neglected. The majority of reading instruction in these schools consists of syllable repetition and memorization. Even so, the syllable method can be used to teach a Spanish speaker to read, and many Latin Americans have learned to read successfully using this method.

For a Quechua whose command of Spanish is not good, however, this method encourages *word calling*—a reading behavior which involves decoding the letters or syllables in a word without understanding its meaning. A Quechua may go through several years of Spanish school using this kind of reading strategy, and even consider himself literate. However, an examination of his understanding of material he reads will frequently show that in fact he derives little meaning out of the words which he so successfully decodes. Thus, a semiliterate's experience with reading instruction in Spanish can result not only in a lack of understanding, but in the expectation that reading is not supposed to convey meaning.

2. Transfer of reading skills

The first remedy for semiliteracy is to get the semiliterate reading in his own language. Recent research in the area of oral reading indicates that when a person reads—graphic, syntactic and semantic information in the text interact with what the reader already knows about his world and his language to help him comprehend the text's meaning (Danks and Hill 1981). When the reader processes text in a language he does not know well, he has little beyond the purely graphic information available to help him make sense of the text. On the other hand, a reader who reads in his mother tongue or in another language in which he is fluent has available to him the full complement of semantic and syntactic information necessary for comprehension of the text.

However, the jump from reading Spanish with little or no comprehension to reading Quechua for meaning is by no means automatic, even though the syntactic and semantic information available is much greater. One obstacle to such a transition may be the reader's poor habit of decoding without attempting to activate the meaning processes; another may be the phonological, grammatical and syntactic differences between Quechua and Spanish. These obstacles to reading Quechua are increased if one has been taught to read via a syllable-based method.

The syllable method does not lend itself well to Quechua grammar, word length or syllable structure. Quechua is an agglutinative language, in which words of many syllables and suffixes are common. Attempting to read such words syllable by syllable, the reader frequently has difficulty remembering the first syllables by the time he gets to the last. Assimilating these *word parts* in order to make sense of the word is thus difficult for a new reader. Another problem with using the syllable method for learning to read Quechua is the number of morphemes that cross syllable boundaries. Reading Quechua syllable by syllable provides few meaning clues. For

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these reasons, the decoding techniques taught in Spanish schools are not very helpful to the Quechua semiliterate when he tries to read in his mother tongue.

Another obstacle to successful transfer of reading skills is the lack of sufficient and appropriate reinforcement in the early stages of literacy instruction. According to reading experts, several hundred pages of text are required to firmly establish the skill of literacy; the young student who is deficient in the language of instruction may never get past the basics, nor get the reading practice necessary to establish reading as a lifelong skill. Furthermore, the Spanish used in whatever material is available for the Quechua to read is probably not commensurate with the *campo* Spanish spoken in rural mountain areas; the mismatch between the two varieties of Spanish adds to the student's difficulties.

For these reasons, transfer from Spanish semiliteracy to Quechua literacy is a skill or set of skills which do not necessarily come naturally to the Quechua reader. Therefore, the development of comprehension skills and some level of awareness of the morphological aspects of Quechua is essential. This is our task if we want to capitalize on whatever reading skills semiliterates have acquired, and develop out of the large number of Quechua semiliterates an audience of people who read for meaning.

3. Developing Reading for Meaning

The semiliterate needs to learn how to read for meaning, and he needs to acquire techniques for getting meaning from text at more than just the graphophonic [symbol to sound relationship] level. There are several ways to incorporate instruction in meaningful reading into a language and literacy program. Three in particular are applicable to any Quechua language program—graded post-primer materials, the development of writing programs, and the use of comprehension-building exercises in early instruction.

Graded reading refers to post-primer material whose content is controlled for certain features. New elements of the written language are introduced gradually; the goal is that by the end of the graded reading series or material, the new reader will be able to read anything written in his language. Traditionally, graded reading means controlling word length and complexity, and the slow introduction of new functors. In Quechua text, such control distorts and makes text unnatural; such *simplification* of the text usually involves removing much of the natural redundancy of language such as multiple references to case or tense. Since context provides the

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reader so much help in understanding the text, removing the natural redundancy of text makes it harder, not easier to read.

Instead of the traditional graded reading, this paper suggests that graded reading for Quechua semiliterates be controlled for abstraction and foreignness. According to several studies (Mulling 1986) natural text, with all the built-in redundancies of natural language, is the easiest to read. Let our goal in *easy reading* material, then, be natural text about concrete, well-known subjects. Such reading could be accompanied by content questions designed to motivate the reader into looking for meaning in the text. Basic materials could feature questions whose answers are explicitly found in the text; more advanced material could include more abstract, inferential questions. As non-native speakers of these languages, we need to resist the urge to *simplify* early reading materials in the ways most appealing to us; instead we should concentrate on building comprehensiveness into the materials and training Quechua readers to look for it.

Another way of teaching reading for meaning is by encouraging semiliterates to write in their own language. The semiliterate who begins to write in Quechua faces the task of putting a message into print, by combining the various grammatical units of his language into written words and sentences that make sense. He has to consider the small units that make up Quechua text; and as he tries to write meaningful text, he learns ever more surely that reading is supposed to convey meaning.

This process is readily seen in a writers' workshop or extended writer training sessions. Participants are given encouragement, ideas, and the assurance that they are now working with a language in which they are the experts. They are given time to familiarize themselves with Quechua orthography and writing conventions, and then are given opportunities to practice composition in Quechua. The author learns the need to consider his audience as he writes, modifying vocabulary and themes according to his intended audience.

One writer training exercise requires each writer to read his own work out loud to his peers; they provide feedback concerning how well he has communicated his message. Not only does he receive their response to his message, but he also realizes as he tries to read what he has written whether or not the message has been encoded clearly. He may find that his punctuation does not allow him as a reader to read fluently; or he may detect and correct his errors before his audience ever hears them. The participant then has the opportunity to improve his work, based on his own observations and the input of his peers.

Writing improves reading. Workshop participants of every educational level, from university graduates to first grade dropouts, improve in their

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ability to read in Quechua. They do not all turn out to be gifted creative writers, but they do gain skills in reading Quechua for meaning, as well as a better understanding of the structure of their language. Thus, writer training develops semiliterate Quechua speakers into readers who are familiar with the written medium and can read and understand anything written in Quechua.

A third way of helping a semiliterate become fully literate in Quechua is through a transition primer. In this context a transition primer may be defined as a book or series of books which aim specifically at the semiliterate's problem areas: long words, comprehension, difficulties with new letters or new letter values. Word attack exercises which focus on meaningful segmentation of words—chunking exercises—would be valuable in a Spanish-to-Quechua transition primer, as would drills comparing and contrasting letters that pose problems in the Quechua orthography. Comprehension could be emphasized by the inclusion of short, meaningful stories accompanied by questions concerning the content. Another good comprehension exercise is the cloze technique, in which a sentence or paragraph is presented, with a blank replacing the target word; the reader must supply the missing word, relying on semantic and syntactic information available in the surrounding text.

Exercises in a transition primer should not include long lists of syllables to memorize, and word lists which have no contextual base. The semiliterate is all too familiar with such exercises, and they will not help him progress towards meaningful reading. If a single Quechua primer is being used for both new readers and semiliterates, the teacher should be aware that the two groups have different instructional needs. For the new reader, some memorization of syllable families, letters and sight words is necessary; for the semiliterate, instruction needs to focus on meaning, not decoding.

Finally, in developing meaningful reading the power of motivation should not be underestimated. Reading materials which capitalize on highly motivational topics are more likely to be attempted by the semiliterate than materials which do not pique his interest. Some people are motivated by familiarity of the topic, as with well-known *cuentos* [fictional stories] or procedural texts; others, by topics with religious interest, such as hymnals and Scriptures; still others, by materials that distract and amuse them, such as riddles and funny stories. There are even those who are motivated by the opportunity to learn something new. However, different people have different motivations, and it is definitely worth finding out where different groups' interests lie before attempting to produce reading material.

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INDIGENOUS EDITING

Riena Kondo

Riena Kondo graduated with a B.A.. in English from the University of California at Davis. While her husband Vic worked on Scripture translation for the Guahibos of Colombia, Riena concentrated on the development of materials for literacy and the training of Guahibo writers and editors

1. Introduction

"This description is no good. I'm going to throw it out and write it over," said J., one of four beginning students in the editor's course.

"Wait!" said H. "How would you feel if it were your own writing?" He went on to explain how editing is like repairing a hunting bow. "If someone gives me a bow that isn't very well made, I don't throw it out. I scrape a little here and scrape a little there, until I have a really nice bow."

"You're right," said J., thoughtfully, "If it were mine, I'd feel bad if they threw it out."

H., a fifth-grade graduate (some of his students had had more formal education than he), was fulfilling our aspirations of an indigenous (minority language) editor, training others in the absence of the linguist. But he had not come this far in a short time. He had already attended two editors' courses, participated in a 15-month editing internship, and taught a writing course in his village, editing the resulting book for publication. Twice he had worked for the linguist as an editor for several months.

2. The training of indigenous editors—too ambitious?

Educational opportunities for indigenous people in Colombia are disparate. We would like to require an elementary education (fifth grade) of those who attend the editors' courses and are very glad if they have more. But we have also had to accept some with less. Considering the relatively low level of formal education, are we overly ambitious to expect to train indigenous editors? Perhaps. But the goal of ongoing literacy depends on a volume of mother-tongue literature to read, and ongoing literature production requires not only writers but editors who know these languages. So we are committed to

working with the candidates available. It may take more time than we would like, but we have had some encouraging results.

3. Purpose and goals of our editor's course

A body of vernacular literature is essential for successful literacy. We have seen how long it takes a literate to read 20 small books, and that number is far from enough. The only reasonable goal is the ongoing production of mother-tongue literature, and for that, editors are as essential as writers.

We envision the indigenous editor not as a narrow specialist (copyreader, proofreader) but as a generalist with skills in all areas of literature production: organization, writing, correction, illustration, design and layout, printing, distribution, evaluation, etc. As more editors are trained for each group, some will develop specialties based on interest and natural ability, but for now indigenous editors need to know everything.

Editors also need some type of community infrastructure that has the support of the people and will serve to guarantee the ongoingness of literature production. In many groups the concept of an organization is new. The editor has to be able to convince the community of the need for books and of the need of an infrastructure for their production. This may require a bit of time, even years, for the foreign concepts to be understood and accepted.

Our principal goals, then, are: editors trained (and some training others), infrastructure in place, books being produced, distributed, and used. These goals may not be totally achievable for every group at this point in their development. Nevertheless, we plan our activities with these eventual goals in mind.

4. Editor's courses

4.1 Training content

In Colombia, the first concerted experience with the training of indigenous editors was a series of three courses offered in consecutive years. (See "Training Indigenous Editors" in NOL 61, 1990.) We now try to squeeze the training int a series of two courses.

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The main subjects are:

1. Punctuation and proofreading
2. Editing (from first draft to print-shop ready)
3. Design and layout
4. Printing (introduction to photocopying, mimeographic and offset, with practice in silk-screen mimeographing)
5. Typing
6. Creative writing
7. Writing of exercises for school textbooks
8. Literary criticism
9. How to teach a writers' course
10. Financing of publications (from within the community and from external sources)
11. Organization of an infrastructure for literature production
12. Planning
13. Distribution (including how to set up and maintain a library)
14. Evaluation of publications and publication projects
15. Orthography development and problems
16. Illustration (brief, due to time limitations)

In most of the classes, there are activities or exercises, in addition to lectures and demonstrations, to give the students practice. Each language group spends several hours a day with a linguist, working on one or more projects. The project is up to the group, and the groups work on books that they believe will meet a felt need in their own communities, such as these examples from the last course: myths, stories for primary school children, how to raise *cacao* (cocoa or chocolate), prereading primers, how things were done in the past (history), etc.

Every other year, we invite a print shop manager to give several lectures. We also have a tour of our SIL print shop and a video of a Bogota print shop. The film *Between Two Worlds* is shown (usually more than once).

4.2 Training manuals

Over the years we have developed special manuals for writers and editors in Spanish, and use both of them during the editors' course.

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The sections of the editors' manual are now:

1. Who makes books and how are they made
2. The revision and editing of a manuscript
3. The print shop and the costs of publication
4. The distribution and care of books
5. The evaluation of the books

The sections of the writers' manual are:

1. Writers' courses
2. How to write in different literary genres
3. How to write school textbooks
4. Literary criticism (and translation)
5. How to print with a silk-screen mimeograph
6. Rules for punctuation and capitalization

4.3 The general results of five annual courses already held

We have conducted a total of five annual courses of three weeks' duration, between 1987 and 1991. Three weeks is not really long enough, but we have not had the financial resources to allow students to bring their spouses and children, in order to make a longer course less of a hardship. As a result, the courses are intensive. We go ahead and present the material, even though some students are struggling, and we rely on the linguists in their time with the students or in follow-up later to reinforce the teaching and provide more practice.

We have held the courses at the SIL Center, with several language groups participating. We have noticed certain benefits from this. Those students who have had doubts about the value of their mother tongue in written form have benefited from the contagious enthusiasm of the others. Interaction between students has also proved helpful for those who find some of the concepts very foreign. They benefit from seeing how someone else in a similar situation is doing things. Because of this, we have also invited some of the better students to return as teachers. This also encourages the advanced students in each language group to help the beginners.

Promising students are expected to take at least two courses; some have taken as may as four. There is review in the courses but no two are exactly alike. In the second course, students do better. However, they still need additional practice to perfect their skills. This they can get working with the linguists on translation checking or editing of

other mother-tongue literature, teaching writing courses on their own, and editing the resulting stories.

5. Literature production infrastructure

Having several writers and editors will not guarantee ongoing literature production. The process needs to be built into the structure of the society. Editors need the help and support of their community in order to do anything, and they need assurance of continuity in case a person (editor, writer) does not or cannot continue. There is a structure and procedure for naming someone else.

Some of our students have struggled when they returned to their communities, trying to convince people that making books is important and that they need help. They are finding it important to work through the existing leaders and that it may be easier to try to plug into some existing infrastructure as an additional section, department, or committee within that existing structure, than to try to start something completely new. Some have found that in traditional face-to-face societies, their attempt to form an independent committee caused suspicion because the whole community was not consulted or involved. People wondered what they were trying to hide. In all these struggles, it helped to compare experiences with other students from other areas. During the course, time was provided for a discussion class in which outsiders (i.e., the linguists) had no part, but rather the students struggled together to find ways to overcome barriers in their own cultures.

We are also finding it helpful in many cases to send letters home with students following courses (not just editors' courses). These letters explain the skills that the students have acquired and put responsibility on the community leaders to give work to the students. The letter may also state which work the students will do voluntarily for the community and for which work they, as individuals, should be paid. It asks the leaders to supervise this so that all involved comply. Sometimes the letter is written in the form of a contract, to be signed by the student, the leader, and the linguist. This method worked very well for a couple of shy editing students. Their communities immediately put them to work, so they could not hide their talents. However, in one case, the community expected too much (instant books), and only the student's threat to resign slowed them down.

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6. Evaluation and results

6.1 General results

We are learning to set measurable goals and develop tools for measuring results. The first thing we evaluate is the editors' course itself. Besides listening to informal feedback, we ask the students, teachers, nonteaching staff, and linguists to fill out a written evaluation of each class and other aspects of the course (transportation, food, recreation, etc.). For each new course we have modified the questionnaire to make it easier to use and more effective. These evaluations help us in planning future courses.

The fact that the students return for a second course makes evaluation easier, especially where the linguist is not able to visit the community for security or other reasons. We ask the students, before they go home, to tell what they plan to do during the year; and, when they return for another course, we ask them how much they accomplished. If they return with a book or a manuscript, the results are visible. We have also used a simple form on which they put down in writing the progress they made. The goal is written at the top, followed by five columns to write: activity, successes, failures and problems, what learned, and plans. Another form allows the linguists to interview their students concerning their use of all the things they studied in the previous course.

6.2 Specific results of the most recent course

During the 1990 course, the students were given a project to carry out in their community, as well as they could, depending on the circumstances. It had several parts, the main ones being: production of a book (after deciding with the community what they wanted and how to write and finance it), a campaign to encourage reading (as part of International Literacy Year), and the formation of an infrastructure (or some steps toward that goal).

This was a very ambitious project, written out very formally, and we were not sure if the students would get very far. We did encourage them to start by speaking to the leaders which most of them did. Most also explained the ideas in at least one group meeting. One group did it twice in six locations. Two groups of students came with manuscripts they had produced themselves, despite not being able to

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sell the need for books to their new village leaders. One of these groups met together weekly to work on their manuscript. Some of the students formally interviewed a few people for a survey of what people would like to read. Others asked them in the meetings. The formal activities are foreign to most of the cultures represented. We assume that considerable informal sharing of ideas went on, and this, though not easy to measure, was probably more effective than questionnaires. One group reported on their evaluation form that the meeting caused new interest.

All the students made calendars during the course to promote the International Literacy Year [ILY]. Only one of them, a school teacher, carried out formal activities (three times) to promote reading for ILY, literacy, and then evaluated them with 80 parents.

All the students returned with manuscripts, whether ones begun in the previous course or ones written in the period between courses. At least two of the students had gotten a number of other writers involved for the first time.

At least two groups without an infrastructure for producing books reported that they had started committees.

6.3 Earlier results

Before the editors' courses began, we knew of two indigenous groups with bilingual education committees that were working on literature production in the mother tongue. After the second course (their first), another group turned their Scripture checking committee into a literature committee that meets regularly, and another group set up a committee and held a writers' workshop. A third formed a committee of course participants.

Some students taught writers' courses. A student of one language, paid by the linguist, taught short writers' courses in several villages, printing a little book on the silk screen press at the end of each course. After the third editors' course, two students from different villages—in another language group—taught writers' courses, backed by their communities. In one village, the results were edited and mimeographed (silk screen) following the course and distributed to several school libraries in the area. In the second case, the results were brought to the SIL center for printing.

Not everyone is cut out to be an editor. After their first course, some realize this and do not return for a second one. Others have

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come to several courses, and continue to develop their skills. Several students, as mentioned earlier, have begun to teach classes in the courses, including organization, literary criticism, culture, etc. All the students do some sharing in class about what they have done at home since the previous course, what they have worked on during the course, answering questions about how they are doing it, and what they plan to do. There is a lot of interest and support in the sharing times. The students practically cheer for each other. They all know how new and difficult the material is, and any progress is equivalent to a victory.

7. Conclusions

As some of us finish our linguistic and translation projects and begin to think about terminating our work and how to work ourselves out of a job, we find that in many groups there are trained school teachers, health promoters, writers, and typists, but we have not trained editors to replace us. That is why we in Colombia began to think about moving beyond the little bit of editing and printing taught in writers' courses to teaching regular courses for editors. After five years and five courses, we believe the results are encouraging, and we plan to continue along the same lines, with slight modifications as needed.

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LOBIS, LASERS AND LITERACY

Fred Eade

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Introduction

Past research in Africa is littered with hidden milestones—significant and relevant statements and conclusions that, had they remained visible, would have been of great assistance to successive workers, be they indigenous or expatriate.

By way of introduction, I want to highlight just two of these hidden milestones that lie alongside the road to effective communication.

The first is found in the Ghana Medical Journal, volume 11: number 4 of 1972, where one author states: "Communication is a two way process, but what makes for effective communication is seldom considered. How frequently is the viewpoint of the receiver of messages investigated (Kwansa et al 1972)?"

As we trace this road back a little further we come to a second hidden milestone in the conclusions of the Graphic Design for Development Seminar held in Nairobi in 1967. This was organised on behalf of UNESCO by the international design forum ICOGRADA. It was concluded, among other things, that when communicating in print across cultural boundaries, use must be made of "traditional motifs, e.g. signs and symbols, present in the environment of the respective audience". They recommended that materials should be used that have a close cultural link with the people (ICOGRADA, 1967).

1. Hidden milestones

But these milestones have remained hidden. The audiences' environment and viewpoint remain largely ignored, so that a VSO worker in northern Ghana illustrates the mistakes evident in many

African countries today when she writes: "The pupils are rural Konkomba speaking only Dagbani, and they are being taught western maths (with no reference to local concepts) with all the text books, guides and syllabus in English (Messenger, 1990)."

One could try and look for excuses, but surely our own experience removes them all. African cultures are visually rich, from Capetown to Cairo and from Dakar to Djibouti strong visual messages are being communicated in a multitude of ways; and yet education in general and literacy education in particular seems to be taking virtually n notice of them. The visual heritage of African peoples remains largely untapped in the teaching of reading.

Even here in the West, where the cultural boundaries are far closer together, it is only in recent years that culture and preferred learning styles have been linked (Carbo, 286). In Africa, sadly, almost all literacy is taught within a narrow set of teaching methods and with only isolated instances of preferred learning style assessment and customisation.

But this paper is not primarily concerned with education per se. I am concerned in this paper with popular visual culture in Africa. So what is this visual heritage? What aspects of the indigenous culture can be used for literacy work?

2. Defining—Indigenous visual convention

We need first to develop and define a terminology and I have chosen the term—indigenous visual convention. This term describes the concept of visual information that is indigenous to the people concerned which has, by its use, established itself as a behavioural regularity, i.e. a convention (Lewis, 1969). This term—indigenous visual convention—can be illustrated in many ways and I'll take just two—colour and mathematics.

3. First example

For the last four and a half years I have been making visits to the Lobi people and their near neighbours in south-western Burkina Faso and northern Ghana. One of the aims of this work has been to identify

the indigenous visual conventions of these groups with a view to improving the effectiveness of literacy materials.

It takes relatively little exposure to these peoples to discover that there are three predominant colours in their popular visual culture and vocabulary—red, white and black. In fact, research shows that as far away as Papua New Guinea these three colours are the principal ones used amongst several different ethnic groups in developing countries (Layton, 1980). So we have already identified an indigenous visual convention, i.e. the predominance of red, white and black, but there is one important qualification that needs to be made—the meaning and significance of each colour varies between each group. So, to be more precise, a multi-cultural visual convention can be said to apply to the predominance of the three colours but a mono-culture visual convention is established when the particular semantics of each colour is included.

So one could legitimately ask the question: How many literacy workers have been taught to capitalize on this indigenous knowledge? How much use has been made of the significance of these colours within this "literacy program soaked" region of the Southern Sahel? As far as I can ascertain—none. This potent set of messages has been left completely untouched, and yet these colours and their use and meaning have been the subject of many lively conversations, once it was realised that *indigenous knowledge is relevant to literacy.*

4. Second example

My second illustration is of indigenous maths concepts that may be taught as part of a literacy program. (See also Girodet 1983, Dalbéra 1990 and Gay and Cole 1967). Retaining in our minds the salutary comments of the VSO worker in Ghana, I would like to juxtapose four common concepts as used by some of the Konkomba and some of the Gonja in northern Ghana, my aim being to show that these conventions exist as discrete variables that are ethnically dependant.

4.1 Weight

Konkomba - a rarely used term

Gonja - a commonly used term

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4.2 Time

Konkomba - marked by natural phenomena. The "week" is determined by the cycle of market days with some areas having three day weeks and others having six day weeks.

Gonja - also marked by natural phenomena but every week has seven days.

4.3 Volume

Konkomba - One sack = 100 units (calabashfulls)

Gonja - One sack = 16 units (bowlfulls)

4.4 Mathematical operators (+, -, ÷, x)

Konkomba - Mathematical operators are used as in the west, plus the verb "to gather together".

Gonja - Addition and subtraction are used similarly. Multiplication is always an increase by the repeated duplication of the original amount e.g. 3 x 4 is expanded to 4 + 4 + 4; division is always into two equal halves e.g. 6 can only be divided into 2 halves (of 3), never thirds, the word for divide more or less approximates to the English verb "to halve".

4.5 Further examples of mathematical conventions

A further example of mathematical convention is found in the differences in the counting systems between the Birifor who straddle the Northwestern Ghana / Southwestern Burkina Faso border, and the Lobi who are found in Southwestern Burkina Faso. As a rule, the Birifor count in base three. So 10 equals 3 + 3 + 3 + 1. The Lobi, on the other hand, count in base five, So 10 equals 5 + 5.

Other examples of a wide variety of indigenous visual conventions abound in extant African research—much of it anthropological. I refer in particular to Madame Calame-Griaule's work on the Dogon (Calame-Griaule 1965) and to Victor Turner's work on the Ndembu in Zambia (Turner 1967, 1968, 1974). Two recent and substantial works

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have appeared on the Lobi containing many examples of indigenous visual conventions that are unfortunately hidden beneath layers of kinship and social organisation study (Père 1988 and de Rouville 1987).

First Conclusion: My first conclusion is therefore that indigenous visual conventions exist, and that they vary from one ethnic group to another and therefore warrant careful examination by literacy workers, in particular, and educationalists in general.

5. A lack of graphic quality

Literacy primers in African minority languages are, in the main, prodigious feats of innovation and effort by literacy workers; often in the face of frustrations and hindrances that would stop lesser mortals in their tracks. The unfortunate lack of graphic quality of many primers and practice books belies the hours of painstaking work by all concerned—African and expatriate alike. However, when viewed from the perspective of the aspiring reader—which is after all our intention—the basic design aim of "the medium being an invisible carrier for the message" is soon lost as Mashall McLuhan's synonymity of medium and message makes its presence felt. In fact I am sure, and conversations that I have had with Lobi and Birifor friends would support the fact, that sometimes the illegibility of the letterforms or illustrations—the medium—is a hindrance to understanding the message. Working as I do in a university department that is vitally concerned with graphic communication, it is hard to overstress the importance of legibility in instructional literature.

Second conclusion: My second conclusion is that from the point of view of the pre-literate, learning to read can often be hindered by the illegibility of the materials used. What then can be done to improve the legibility of such productions?

6. Computers/printers improve graphic quality of literacy materials

Talk of using computers will sometimes result in amazing behaviour changes on the part of the Africanist listener. Responses vary from the equivalent of "You cannot be serious man!" to "You wouldn't believe the trouble I had coming through Bamako last month with my Toshiba portable". The use of computers is now an everyday experience for many of our colleagues—field linguists, anthropologists

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and literacy workers. Technology is becoming more useful and feasible in the climatically challenging environments in which most of us work.

Out of the experience gained from setting up and running a desktop publishing system in Burkina Faso, I have no hesitation in concluding that the high quality dot-matrix printer or the laser printer is the most significant piece of production technology for minority language group literacy since the arrival of the stencil duplicator and the manual phonetic typewriter. This view is corroborated by the current use and ongoing developments in both UNESCO and the Summer Institute of Linguistics using laser printers. The Premier fonts from the SIL and the Afralpha fonts from UNESCO may actually herald a new level of graphic quality in minority language materials that has been absent for too long.

Third conclusion: My third conclusion is that the current use of high resolution dot-matrix and laser printers will significantly improve the letterform legibility of vernacular literacy materials.

But where does that leave us in relation to popular culture in Africa? What connections are there between people like the Lobi, laser printers and literacy?

7. Final conclusion

My final submission is this—that the cultures of African people contain deep seated sets of what may be called "indigenous visual conventions". These can and must be taken into consideration when producing literacy materials. However, to do so without concurrently improving the general standard of legibility in such literature would be patently incomplete. The technology has been proven that can help us in this matter. Vernacular literacy can become much more effective if both the improved legibility of the graphic images and the indigenous visual conventions of the people that are learning to read, can be combined.

Milestones such as these must be left clearly visible as we communicate literacy more effectively.

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LOOK BEFORE THE PENCIL LEAPS

Russ Cooper

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"When the trainer wears the blinders, what happens to the horse?"

Introduction

The **writer's workshop**, naively taught, is an area where an outsider's framework may be superimposed—with less than satisfactory results in the literacy program for which the workshop was designed.

An expert's ability to obtain feedback from those being trained can be limited if he perceives of expertise as a one-sided process. Trainees often have a great deal of expertise themselves to offer in a cross-cultural training context. Without an attitude of mutual respect in a "learning together" model, cross-cultural programs will be less effective.

1. Three blinders which inhibit the process

1.1 The "write me this kind of story please" blinder

Looking at discourse types, the specific writing tasks in a training agenda may be predetermined in the light of certain end goals or a philosophy of literacy that the trainer wishes to implement. This results in "stories" or "essays" being assigned that belong to specific genre or types to the exclusion of culturally natural texts in relevant genre, which are often much more exciting to a local readership (or that may be filtered by certain constraints in the model).

1.2 The "let me teach you how to be a better writer " blinder

Meanwhile, by not looking at the constraints imposed on a language by its own *syntactic* and *discourse strategies*, the trainer may be asking local writers to distort various grammatical constraints. This can range from teaching them how to write topic sentences, asking them to follow western-style outlining techniques, to inappropriate use of rhetorical questions, and even to punctuating in the wrong places.

1.3 The "when you write it, here's how its different than how you say it" blinder

By not having made an in-depth comparison of the relationship between *oral* and *written* discourse styles, the outside "expert" can be lulled into a faulty analysis of this relationship both by his own and by mother-tongue speaker preconceptions.

What is the point? The point is that when we teach writing skills *before* we learn where the students are coming from, we may distort the features of their cultural and linguistic grid and in the process make the results less meaningful, and perhaps almost totally irrelevant or inaccessible to the audience we believe we are serving.

2. Addressing the three blinders

2.1 Genre— "Write me this kind of story please."

Robert Frost, lecturing at a university once said: "Go out each day, expecting the unexpected (Elder, 1964)."

Often we leave very little room for the *unexpected*, in our writer's workshop programs. We have our lesson plans all made out before we begin the workshop and the assignments are already laid out in advance.

Our first set of blinders involves discovering the *relevant genre or types of discourse* to which people relate in a local culture.

Typically, a writer's workshop formats with which I am familiar will focus on outsider objectives such as creating a body of texts *for linguistic analysis and translation*, will ask for traditional narrative, personal narrative, descriptive, procedural, hortatory texts and the like. Workshops *with literacy goals in mind*, may, indeed, ask for traditional

or personal narrative-type stories, but more often *suggest* than *ask* what kinds of stories those should be. Literacy workshops for designing materials for new readers will also ask for the texts to be constrained by a controlled use of vocabulary and/or phonemes, introduction of repetition, and the use of "simple language" (Translate: "primerese") often with over-use of naming words, and a reduced number of connective devices, with unnatural constraints on verb forms.

Not often enough does one see a writer's workshop plan in which the organizers have taken these particular blinders all the way off, that is, to develop a workshop in which it is built into the planning that cultural insiders will work with the workshop coordinators to *discover* with the help of their students, what kinds of stories *they enjoy* and *would like to produce* for their own groups.

3. Some "hidden" genre that excite interest

Let me share with you a number of fascinating genre and sub-types, less often asked for by workshop leaders, but which are "alive and well" in a number of areas of Papua New Guinea.

3.1 The anti-hero or inept *Fall-Guy*.

In Buhutu these are called Boniyawa stories, from boniyawa "to be late." Tubetube islanders call the same genre Magilaki stories.

There are two sub-types, the first are traditional stories about the Boniyawa or Magilaki people, set in an unspecified traditional past. The second type are those told on one's friends or neighbors who behave in similar ways to the "anti-heroes" of the traditional tales.

Subtype 1: Traditional

> The Boniyawa villagers make a raid on their enemies. They paddle off in the middle of the night for a sneak attack but paddle all night with their paddles held upside-down. A rooster crows and they say, "Ahah! we've reached the enemy village." Beaching their canoes, they sneak up and set the houses all afire. As dawn breaks they see that they've paddled

houses all afire. As dawn breaks they see that they've paddled in place all night and just burnt their own village to the ground! (story as retold by Linden Butuna, Bonalua Island)

Subtype 2: Real life

Case A: Some boys go out fishing at night. One boy, Yoko, falls asleep squatting on the canoe platform. The others warn him, but he gives no heed. The steersman jerks the canoe and he falls into the sea. (written by Matiematie Ekai, Sagarai)

Case B: We are taking care of a cat for another family and bring it out to our village in our truck. Not used to vehicles, it runs away into the bush. When I retrieve it, it struggles to get loose and tears my shirt to shreds. My neighbors think this is a wonderful story! (Russ Cooper, SIL, Sagarai)

Case C: Another translator takes some trash out over the reef to dispose of it in the sea. Unfortunately the canoe has a hole in it, and sinks. From a completely submerged hull floating nearly a foot beneath the surface, he is seen from the shore still frantically bailing, trying to keep the sea out. (Alan Canavan, SIL, Tubetube)

This kind of story is sometimes told about the people of a certain backward village or neighboring language group who are perceived by their neighbors to be particularly "inept". Thus the genre may in some cases be very close in type to an ethnic slur. When this is true, caution must be observed as to whether it is ethically appropriate to publish stories in which the "anti-heroes" are identified with a specific group of people who are always the butt of everyone else's jokes.

In a collection of about 150 Buhutu texts, where anyone can be the subject of the next story, this does not seem to be the case, and it is consistently texts of this genre which are asked for over and over for reading aloud, *not* the traditional stories.

3.2 Traditional wisdom

The word for *advice* in Buhutu—**gaimumu**—is the exhortation that may be given in a village meeting, but more significantly for literacy

purposes, it is also the unwritten book of pithy sayings, & proverbs that govern one's behavior.

Once a few such sayings were recognized, we sat down one day asking our village landowners family about them. To our surprise they began immediately to recite a list which proved to be a list of "chapter headings" for this book of traditional wisdom.

Mahula - Good Gardens

Miya Lofalofa - How to Have a Long Life

Nahi - Marriage

Nanatudi - Care of Children

Mata Heyaya - Adultery

Angafu or Nimalaulau - Stealing

Tabu Ti Andamu - Hoarding

Manabala or Nuwahalahala - Anger

Pwa'iu - Jealousy

Gadigadigugu - Complaining about Others

Lau Mwanunu - Gossipping

Fa'atiti - Respect for others

(Source: Modewa & Cecelia Welaniya, Bessie Welaniya, Sagarai Valley, cited in Buhutu Background Study, 1988)

The topics are recognized, the sayings are categorized, but the "book" is not organized by an internal linearly ordered outline. Rather, it is an "expert system" in the minds of the people, and is drawn upon by the stimulus of a behavior which requires or elicits a response.

3.2.1 Examples of gaimumu

In the garden, a parent will say, "Hold your finger up to the west wind in its season, hold up your finger to the east wind in its season and your garden will prosper." (Robert Yamauli, Sagarai)

"Bury your garden rubbish carefully because God is always looking down." (Rosalie Ruatoka, Fife Bay)

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When one sees a rainbow: "Don't point at the rainbow or your finger will fall off (common saying)."

When a child is misbehaving: "If you do like that, your **foo** fruit will fall before it is ripe. (meaning: you will die young; you won't live to a ripe old age—Robert Yamauli, Sagarai)."

When planning a pig-feast one prays, "God, you send your hotness (power) down to me. for I send my coldness (weakness) up to you (Rosalie Ruatoka, Fife Bay)."

When teaching in a literacy workshop involving mother tongue students from many parts of Papua New Guinea, we did a shell book on traditional values, and both they and I were excited to find that this kind of unwritten book of advice exists in the minds *of each of the groups* represented.

The shell book that triggered off this profound response is called **Traditional Values**, or **Pasin Bilong Ol Tumbuna**.

3.3 Traditional games

A third potential place where interesting genre may be discovered is in relation to traditional games.

String games or cats cradles sometimes involve only a series of simple movements with a name given to the figure produced, But often there is a story, a rime, and a plot that go with the string figure.

These are examples of simple figures without a set narrative:

The Paddle

The Poling Stick

The Crab

The Fishing Spear

A counter example which is very elaborate is the story called—**The Two Witches**. It is a very elaborate figure involving fingers, toes, and mouth for production and is accompanied by free narration for the earlier moves, then a stylized formulaic recitation for the denouement in which one witch or the other suddenly swallows up the other.

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(Source, Clare T. Ruatoka, Fife Bay, Ethnographic field notes, Nov 1984.)

Ethnographically recording these games requires that one learn a nomenclature for various movements and positions. Gunter & Barbara Semft of the Max Planck Institute have recently done documentary videos on string figures in the Trobriand Islands in Papua New Guinea.

3.4 Song, drama and mime

Folkways at the boundary of speech and song are often untapped. Two sorts of example follow:

3.4.1 Spontaneous song. Analogous to street rap in its original form, spontaneous song may accompany work activities, or "just happen" when an individual or group are walking along a trail, when "whistling up the wind" to get one's canoe to go faster, etc. (Participant observation with Kapena Ronald, Fife Bay, 1984)

I once had a song composed in my "honor" when I momentarily "blanked out" after getting up too quickly from blowing a fire. A witty youngster belted out abut six verses celebrating my ineptitude in immortal but fleeting song.

Children and young people often produce what seems to be extemporaneous songs when walking along a path or road. This is not to be confused with work chants or other songs which are fixed in form and often in content as well.

3.4.2 Peroveta. Among the Papuans, where most of the early missionaries were Polynesian, not European, a type of song was introduced called the **peroveta** or 'prophet song.' These are quite long narrative songs about Biblical events, often sung using antiphonal and other elaborating devices, not in churches, but at all night feasts. Dancers will perform rather freeform interpretive dances which do not act out the texts, but express the emotive content of them.

For many decades almost everyone within the London Missionary Society subculture were eagerly learning these songs, and as late as 1968, these songs were passed up and down the South Coast by cooperative crewmen and captains on the coastal steamers via cassette recordings—completely outside the framework of the expatriate missionaries' programs, and I suspect outside their sphere of knowledge.

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Of recent years, the interest in Peroveta seems to be dying out among the younger generation. However, a more fundamental issue is that when literacy becomes perceived as part of the "western" school system, rather than a vehicle for appropriately expressing cultural values, we may be guilty of wrenching traditional teaching and art forms from their functional place in the culture and hasten the loss of those cultural expressions we say we are trying to help people preserve.

SUMMARY

The point here is that we do not even take time to observe the rich tapestry of local genre and literary types, but so often rush in as outsiders, superimposing our own agenda for "what we are going to write about today" in a workshop.

We may collect valuable material for certain purposes in our programs, but we miss out on the things that motivate interest and enthusiasm from *within*, and then wonder why our books of traditional stories, first person experiences, and descriptions are not bought and not read, when in fact, they may be the items of very lowest interest for reading, simply because they are *passé* (and too familiar) in the minds of the people.

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REVIEWS

Stephens, Diane. 1991. Research on Whole Language: Support for a new curriculum. Katonah, NY: Richard C. Owen Publishers, 1991. Pp. viii, 73. Paper $9.95.

Reviewed by P. L. Blackburn

This work by Diane Stephens is more than just an annotated bibliography. As she jokingly adds, it is "Whole Language: annotated studies, with a very long introduction" (p. vi). She not only provides a thorough annotation for each work listed, as one would hope, but, moreover, she provides a very effective introduction to the concept of Whole Language in general education and literacy. In brief chapters she discusses Whole Language in historical perspective, Whole Language as philosophy, and Whole Language as practice.

Stephens points out that many educators fail to comprehend that Whole Language is not just another method; it is a philosophy of learning. The thirty nine studies represent "scholarly reflection rather than an anecdotal recollection of events", and those where "classroom descriptions or instructional programs were consistent with Whole Language as a philosophy". She considers the following characteristics to be consistent with such a philosophy:

1. Children are engaged as learners. They use language to make and test hypotheses, to explore possibilities, to reflect on what they have learned, and to decide about what they want to learn next.

2. Teachers are engaged as learners. They see themselves as professionals, read widely, and reflect often. They plan extensively, revise as necessary, and assess continuously. Their observations, reflections, and decision making are driven by their vision of what it means to be literate and educated. They establish environments that facilitate learning and use demonstration and response as primary teaching tools.

3. Learning is a social process, and transactions among teachers, students, and curriculum significantly contribute to the learning that occurs.

4. Texts in use are whole, cohesive documents that serve a purpose for the learner and have an audience broader than just the teacher.

The studies are divided into two categories: case studies of individual children, and descriptive and comparative classroom studies. She also provides a helpful chart, listing the articles according to researcher, publication date, grade level examined, if comparative study, and if includes at-risk population. Her annotations are well written, effectively presenting both the study design and a summary of findings for each.

Stephens' book will be very helpful to those who are already involved in Whole Language. Even more importantly, her book will give those just exploring Whole Language an enlightening introduction and an effective look at the literature representing this philosophy.

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Save for Acquisitions

NOTES ON LITERACY

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NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Permission to use articles, either in full or in part, must be obtained from the editor.

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Summer Institute of Linguistics, Inc.
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ISSN 0737-6707

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A MISCUE ANALYSIS OF YALE READING ABILITY

Delle Matthews

Delle Matthews has been a member of SIL since 1982. She has an M.A. in Linguistics from the University of Texas at Arlington and has served as Literacy Coordinator in Indonesia. She is currently teaching literacy at the SIL School in Australia.

1. INTRODUCTION

In many of the situations where SIL literacy specialists work there are a significant number of semi-literates. These are usually people who have learned to read in the national or trade language but who for one reason or another have not reached fluency. In order for these people to read any vernacular literature with understanding, they not only have to make the transfer to reading in the vernacular, but also have to improve their reading skills.

One of the most obvious characteristics of semi-literates is that they read slowly, usually word by word and without natural phrase and clause breaks. They attempt to sound out, syllable by syllable, any words they don't recognize, and their mistakes are usually phonic ones. They lack confidence in their reading and often correct themselves and repeat what they have just read. Because of the concentration of effort in decoding unfamiliar or barely familiar syllables, little energy is left for understanding. It is no surprise that semi-literates find reading difficult.

1.1. The Yale

These generalizations could be said to be true of the Yale semi-literates. The Yale live in the eastern highlands of Irian Jaya, Indonesia. There are approximately 2000 speakers of Yale, the majority of whom are illiterate. There are, however, about fifty young men and teenagers who have received some education through either church or government schools, and who could be classed as semi-literates. They learned to read in the national language, Indonesian, but have expressed a desire to read in Yale also.

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The Yale language is a Papuan language and, while the non-verbs are not excessively long, the verbs (which occur clause final) can be heavily suffixed. The orthography does not differ greatly from the Indonesian orthography: there is only one symbol not found in Indonesian, there are three vowel digraphs, and some consonants have a different distribution pattern than in Indonesian.

This paper documents my attempt to analyze the specific reading problems of the Yale semi-literates. At the time of the research, they had come a long way in the process of learning to read, and I wanted to know exactly how they could be helped to read Yale literature with understanding.

1.2. Miscue Analysis

The approach I took was to sample the reading of the semi-literates and analyze their miscues to determine the patterns of response and how they approached the reading task. This was supplemented by personal observations made over many hours of observing the Yales read and write.

Miscue analysis was first developed by Kenneth Goodman. It is based on the premise that all responses to print are caused and are not accidental. Responses that are not the same as the expected responses are generated through the same process as the expected ones. These unexpected responses are called *miscues* and are not random but follow a pattern. A careful study of this pattern can give us a glimpse of the processes that any individual reader employs in the reading process.

1.3. Model of Reading

One's interpretation of a pattern of reading miscues depends, obviously, on the model of reading adopted. The model I have followed is that of Marilyn Jager Adams (1990:22), which suggests how parts of the system, which Adams calls *processors*, work together.

Adams (1990:21) says "To be fluent and productive...reading also depends on ready knowledge of words—their spellings, meanings, and pronunciations—and on consideration of the contexts in which they occur". These skills are the responsibility of four different processors

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which work together. They are the orthographic, phonological, meaning, and context processors.

The orthographic processor is responsible for perceiving the sequences of letters in text. This stimulation is then sent to the phonological processor responsible for providing their pronunciation. If the sequence of letters is pronounceable, a message will be sent back to the orthographic processor. The meaning processor provides the meaning of the word, whose stimulation can also cause the phonological processor to respond with the correct pronunciation. In reverse, the pronunciation stimulation from the phonological processor will stimulate the meaning from the meaning processor. For familiar words, this may be a redundancy, but for less familiar words the pronunciation provides a backup system for finding the meaning. The context processor is then responsible for constructing the ongoing meaning of the text.

Interpretative comprehension requires active attention and thought. The effort and discipline readers can invest in comprehension depend on how well they have completed the processes that support it. If readers have a thorough knowledge of letters, spelling patterns, and words and their pronunciations and meaning, then the necessary energy will be available to focus on an ongoing understanding of the text. Skillful readers recognize the spelling, pronunciation and meaning of a familiar word almost automatically and simultaneously. This leaves them free to concentrate on critical and reflective thought. Semi-literates, on the other hand, expend a large amount of energy matching the spelling and the pronunciation in an attempt to determine the meaning of individual words. They have little energy left to focus on comprehension of the ongoing text. This accounts for the characteristic pattern of word-by-word reading, phonic errors, lack of attention to phrasing etc.

Adams (1990:25) goes on to say that semi-literates "characteristically block on long, polysyllabic words". Literates are able to break words into syllables and from an overlearned knowledge of their pronunciation determine what an unfamiliar word is. Literates are also sensitive to the roots and affixes of polysyllabic words, which, Adams says (1990:29), is due to a strong linkage between the orthographic and meaning processors. Semi-literates are weak in these skills.

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2. THE METHOD

I began by choosing a passage in Yale about 140 words in length. It had been written by a Yale author about a recent and well-known event in the village. I typed this double-spaced and mounted it on a card. I had several other copies available to mark the miscues of individual readers.

Seven male subjects participated in the reading. There are very few women who can read and I was unable to get a female volunteer. The subjects were a good cross-section of the Yale semi-literates who had learned to read at the government school. Those educated by the church were not represented. Their education level ranged from 4th to 6th grade and their ages from approximately 12 to mid-20. Some were still at school and some had left several years earlier. The three poorer readers (slower with more miscues) had reached 4th, 5th and 6th grades. The 6th grader was recognized to be behind in his class and had to repeat a few years to get there. Of the remaining four, two had graduated from 6th grade and two were likely to pass 6th grade exams that year, according to their teachers. They all volunteered to read the text and had previously asked me to teach them to read Yale. For three of them, this was the first text they had read in Yale, although the others had not seen very much material written in Yale.

I asked each subject to read the story silently first and then to read it to me. I made a tape recording of that reading. Subjects were not given any help on difficult words. I asked them to retell the story after they had finished reading it. However, after a few had done this, they had all found out what the story was about so it was difficult to assess comprehension.

Later I replayed the recordings and marked the miscues on a blank copy of the story, one for each subject. I noted repeats, omissions, additions, self-corrections, incorrect attempts, and the time taken to read the story. All the subjects read slowly and without phrase and clause breaks or proper intonation.

Then I charted each subject's miscues, noting which ones were self-corrected, which were repeats, which were syntactically and semantically correct in the context, any omissions or additions of words, errors on the suffixes or suffix omissions, and other phonic miscues and

whether they occurred on the phoneme, syllable or word level. These were calculated into percentages of the total words in the story.

I then totaled the individual percentages for each item and found an average. I was more interested in discovering what might be true of the group of Yale semi-literates than of any one individual.

3. RESULTS

On average the subjects made 49 miscues (ranging from 24 to 71); that is, 36% of the words in the text were miscued. Many of these(42%) were simple repetitions (i.e., the word or phrase was read correctly but repeated); 40% of miscues were self-corrected (i.e., the first attempt was incorrect but the final one was correct). If repetitions and self-corrections are omitted from the total miscue count, then subjects made an average of 16% of *other* miscues.

Of the repetitions, the majority (68%) were on the word level, 24% were on the phrase level, 7% on the morpheme level, and only 1% on the clause level.

Of the self-corrections, 62% were suffix problems and 38% were on a root morpheme. Of all attempts, 66% were clearly attempts to reconcile the phonetic with the orthographic and to sound out the word. It is impossible to know how many of the other attempts were corrected because the reader recognized that the meaning was incorrect in the context. Very few first attempts were real words.

The remaining miscues I divided into two groups: those that were on the suffixes (by far the majority—72%) and those that were not (28%).

While there are suffixes on words other than verbs, the majority are on the verbs and these are the ones that caused the most trouble for Yale readers. The subjects tested had three approaches to unfamiliar suffixes. In 57% of the cases, the suffix was just omitted. In 33% the suffix was changed in some way. Only 10% of the cases were an addition of suffix that was not in the text. The majority of suffixes omitted were the switch reference marker, the locative, or the coordinating conjunction in lists. These are not obligatory suffixes. The majority of suffixes changed, however, were the aspect and tense/person markers, which are obligatory in Yale.

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These are the averages for all the subjects. However, they could be divided into two groups according to their strategies. Three out of the seven subjects more often made a substitution and changed the suffix. The other four preferred to not even attempt the suffix but rather omit it altogether. Additions were rare and evenly matched for each group. It is interesting to note that those who preferred to attempt the suffix also had the highest percentage of *other* miscues (i.e., non-repeated, non-self-corrected miscues), averaging 27% compared to 8% of the four who preferred to omit the suffix.

100% of the suffix substitutions were real suffixes and not nonsense. There was a remarkable amount of consistency in these miscues. One reader started reading in the near past tense and continued using that tense on all verbs, although the text was written in the far past tense.

Contextual meaning was relatively good on the words with suffix miscues—79% were acceptable semantically and syntactically. In fact, since many of the errors were on the final suffix only, the meaning of the word as a whole was not greatly affected.

Only 18% of the non-suffix miscues were a substitution of one phoneme in the word, 4% involved only one syllable in the word, and the majority (78%) involved more than one syllable of the word. In the majority of cases, meaning was lost altogether.

4. DISCUSSION

A pattern emerged of the reading ability of Yale semi-literates. In Adams's terms, they are weak on the linkages between the various processors.

There is some uncertainty of knowledge of letters and their pronunciations. All the words in the story are within the average Yale vocabulary and all the subjects know their pronunciation and meaning in oral language. Because the linkage between the orthographic and phonetic processors is weak, the linkages to the meaning and context processors are also weak. So much energy is taken up establishing the links between the orthographic, phonetic, and meaning processors that little is left for understanding of the ongoing context.

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In reading, the subjects know the letters, although some of the letters are not known well. The one symbol and the digraphs found in Yale and not Indonesian did cause some problems, but most were self-corrected with the correct pronunciation emerging. Observing these men write, however, I noticed that they did not know which upper case letter is associated with which lower case letter. In fact, they did not know the purpose or usage of the upper case letters at all. Obviously, these men could benefit from some instruction on letter recognition, particularly of the upper case letters.

Most miscues were not on the phoneme or even syllable level, but over more than one syllable and commonly on all syllables of the word. Also, repetitions were most commonly on the word level. This leads me to describe their reading as being word by word. On the orthographic level there was very little recognition of words as a whole and poor matching ability with the meaning and phonological processors on the word level. Correct phrasing and intonation was nonexistent. None of this is surprising, considering the small amount of exposure the subjects had previously had to reading Yale.

The subjects did know the pronunciation of isolated syllables and appeared to be able to break longer words into syllables in order to sound them out. This was clear on the miscues that were self-corrected. Many of them were simply a gradual build-up of the syllables, adding one at a time. At least this is true of the shorter and medium-length words. The longer (and for some subjects the medium-length) words caused the most problems. Subjects did not show any ability to break up the syllables or remember them all together.

Since the majority of miscues were on the final suffixes, it seems the subjects follow a strategy of starting at the beginning of a word, processing chunks from left to right, and then pronouncing the word (a) when they have taken in as much as they can recall in one reading, or (b) when they think they can guess the word. I suggest that the latter strategy is the one used by the subject who read the whole story in the wrong tense. In this case attention was paid to the context of the ongoing text. Association between the orthographic processor and meaning processor was weak and perhaps non-existent. Again, this is not surprising considering the subject's lack of experience in reading Yale.

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Instruction on and practice in breaking longer words into syllables and separating the suffixes would benefit the Yale semi-literates. They could also benefit greatly by instruction on the linkage between the orthographic representation of the suffixes and their meanings (good old functor drills!).

It appears that if correct pronunciation was achieved, then the meaning of the word was known. I doubt that the meaning processor prompted pronunciation in any case. This will become possible with much more experience in reading Yale.

The subjects' ongoing understanding of the text (i.e., the linkage between the meaning and context processors) was reasonable and perhaps better than would be expected. Contributing to the comprehension of the text was probably the fact that the total number of miscues was only 16% and few of these caused a total meaning loss. It also helped that the incident about which the story was written was familiar,. It could be that the Yales are used to gaining as much understanding as possible from a belabored reading since there are only 2 or 3 who can read fluently. They would clearly benefit from instruction which would strengthen the linkage between the meaning and context processors.

The Yale semi-literates would also benefit from instruction in reading to speed, with proper phrasing and intonation. They do not know correct usage of punctuation marks. This is obvious from their writing.

5. CONCLUSION

In summary, an instructional program for the Yale semi-literates should include a strengthening of their knowledge of letters (particularly the upper case) and syllables; practice in breaking longer words into syllables and developing recall when matching the orthographic representation with the pronunciation; and practice in separating the suffixes from each other and the root and recognizing their meaning automatically. Reading practice using connected material would strengthen the automatic recognition of commonly used words, as well as strengthen the role of the context processor. It would also give the opportunity for increasing speed of reading and developing skills of proper phrasing and intonation. Specific instruction on punctuation conventions would help, and opportunities for writing would further enhance reading skills.

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The Yale transition primer sought to develop these skills. It was successful to a point. The students need more of the same type of exercises and texts in order for these skills to become automatic. However, progress was noticeable. This was particularly true of the poorer readers. Their average decrease in the total number of miscues (including repetitions and self-corrections) was from 36% to 11%. All the students increased their speed of reading.

There are obviously some inadequacies in this research. Comprehension was not ascertained. It would also have been beneficial to have done a similar analysis of these men reading Indonesian. From observation, the number of miscues would have been about the same with the problem being more lack of knowledge of the language than of a recognition of the suffixes. Certainly, a follow-up study of these students after they have had a lot of experience reading Yale would be revealing. At the time of the research very little had been published in Yale, so familiarity with reading Yale was almost impossible. There are now a number of publications available.

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ALTERNATIVE APPROACHES TO LITERACY

Tom McCormick, Ph. D.

Tom McCormick worked in Peru as a short term assistant with SIL from 1985–88. He has also held workshops and consulted with teams in Africa and Papua New Guinea in the area of reading theory, primer preparation and literacy program planning.

The following series of instructional videos has been designed to help meet the growing demand for missions personnel qualified both to conduct "village level" literacy programs as well as to train others to do the same. These videos have been designed to complement, not compete with nor replace, the other known training programs in literacy. As such they are especially appropriate for on-the-field updating workshops for both general literacy workers and literacy consultants. Their aim is to equip literacy personnel with the principles and the confidence for making the many kinds of practical decisions required in the wide variety of situations confronted while serving the peoples and cultures emerging into literacy. The series contains 12 videos (simply filmed, 45 min. lecture + 15 min. discussion). The series is available from *Canadian Centre for World Mission*, 52 Carondale Cres., Scarborough, ONTARIO, Canada M1W 2B1. The cost is $100 US plus postage. (There is a small additional charge for photocopying the reading assignments and discussion questions, if requested.)

1. *Alternative educational commitments--#1: Common Beliefs about Education & Reading.* The importance of our general beliefs about education is considered in relation to educational, and specifically reading, practices. The 3 major approaches to education are presented and compared. You are encouraged to become aware of your own preferences.

2. *Alternative educational commitments--#2: Critical Pedagogue, Creativity & Reading.* The influential work of Paulo Freire is considered. I show how Freire's understanding of the human being influences his approach to education and reading. A Christian critique and alternative is introduced.

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3. *Reading as a Social Process: Part I.* Is literacy more an individual or a social process? Three metaphors for literacy are presented: literacy as adaptation, as power, and as a state of grace or salvation. Two "snap shots" are given to illustrate the social dimension of literacy: Alaskan Eskimos and native Hawaiian children.

4. *Reading as a Social Process: Part II.* Develops reading as social, first in terms of the 3 dimensions of the social learning situation: student-student relations, the school-community relation, and the teacher-student relation. Secondly, shows that what actually "counts as reading" is a construct of social interactions.

5. *Oral tradition and literacy.* The importance of the distinction between spoken and written language is discussed. Two key concepts are elaborated: decontextualization and the "*artful* oral genre." The *artful* oral forms are proposed as a bridge to literacy.

6. *Literacy and schooling as ritual.* Examines the relations between literacy, schooling, and ritual. Concludes by proposing for further discussion that schooling be considered as a form of *festivity* and reading instruction as a form of "play." These are "serious concepts" which must be considered in context. Some of the lively discussion which resulted is included at the beginning of video #7.

The second six presentations focus more specifically on what is known about the reading process from the perspective of the individual reader. Special attention is paid to the beginning reader.

7. *Understanding early reading.* We examine the common conception that early reading is primarily the decoding of print to sound. Much evidence is presented that this hypothesis needs careful refinement. Four general stages of reading development are sketched.

8. *Early reading: Two recommended practices.* With so much proving so controversial within the field of reading, it is refreshing to consider 2 practices which receive almost universal approval: reading to and with the beginning reader, and teaching the alphabet.

9. *Understanding reading: Part #1.* Shows that the 3 approaches to education in general are correlated with the 3 general approaches to understanding reading. Presents some of the experimental evidence which must shape our own understandings of reading.

10. *Understanding reading: Part #2.* Argues that a literacy specialist is something like a doctor, one who helps if necessary, and where possible offers suggestions for improving what's "natural" in a particular cultural situation. As such, some specialized knowledge is required. Begins to present some of that knowledge by examining the role of sound in the visual task of reading. Concludes that decoding to sound is neither necessary nor sufficient for reading.

11. *Understanding reading: Part #1.* Video #10 continues by showing that nonetheless decoding to sound is "natural." Several key experiments are presented for evaluation, specifically, the "silent e" phenomenon, phonological reverberation, categorical-decision task, and cross-linguistic evidence from the Stroop phenomenon. Though somewhat "technical", these experiments consistently prove both comprehensible and delightful.

12. *Understanding reading: Part #1.* This final video summarizes what we have done and begins to draw out concrete implications and applications from what we have learned. Hopes to illustrate that there are very specific recommendations which result, and therefore that we need to continue to mine the research resources available so that our programs are as responsible and effective as possible.

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PRINCIPLES OF MULTIDIALECTAL ORTHOGRAPHY DESIGN

Gary Simons

Reprinted, by permission, from Workpapers in Papua New Guinea Languages, Volume 21.325-342, 1977.

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1. INTRODUCTION

Language variation limits communication. In spoken communication, dialect variation may be so great as to prevent speakers of two dialects of the same language from understanding each other. However, many of these limits to communication can be overcome in written communication. For instance, differing pronunciations of the same word are unified by writing them identically in the orthography. Each reader assigns his own pronunciation to the written symbol.

This paper presents seven principles to follow in designing an orthography which minimizes dialect differences—a multidialectal orthography. A multidialectal orthography is one in which the phonologies of many dialects of a language are compared and accounted for in designing the orthography. The social situation pertaining to the dialects is also considered. We add the further requirement that each possible solution to an orthography problem be examined with respect to each of the dialects to determine the solution that will involve the least effort in learning to use the orthography for the language group as a whole. The discussion of these seven principles is preceded by an examination of some advantages of a multidialectal orthography.

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2. THE ADVANTAGES OF A MULTIDIALECTAL ORTHOGRAPHY

A multidialectal orthography is always designed to be used by many dialects. The advantages of a multidialectal orthography are discussed in two stages. First, the advantage of having one orthography for many dialects, rather than having many orthographies, is discussed. When one orthography is used for many dialects it need not be a multidialectal one. It could be a unidialectal one—an orthography based on the phonology of one dialect—which has a wide area of use. Thus the second stage of the discussion deals with the advantage of a multidialectal orthography over a unidialectal one in reaching many dialects.

2.1 The advantage of one orthography over many

The tremendous value of having one orthography which covers many dialects is illustrated by the English orthography. Although English spelling has been heavily criticized for not being 'phonemic', it has scored a great triumph in uniting the different dialects of a very large and diverse speech community. Many of these dialects are in fact mutually unintelligible. To expand on this virtue of the English orthography, I give the following lengthy quotation from an essay by John Nist, 'In defense of English spelling' (1966).

> English spelling minimizes dialect and regional differences within the English language on a worldwide scale. When William Caxton made printing one of the supreme cultural forces in England in 1476, he elevated the Spoken British Standard of London to that of the Written British Standard. Thus the visual morpheme became a power in reducing differences of pronunciation to a single written version. From that reduction, of course, today the three major forms of Modern English—British, American, and Commonwealth—are very nearly identical on the printed page: a great source of the linguistic unity and cultural solidarity of Anglo-Saxon Civilization. If English spelling suddenly became phonemic, however, it would tend to fragment and divide that civilization. If all speakers of the language wrote exactly as they talked, soon would emerge a far more danger-

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> ous confusion: that of the inability to communicate with ease. What difficulty the Texan would have in reading the letters from his New York cousin; how hard it would be for the Lancashire farmer to decipher the reports of an Australian soil physicist; with what intellectual sweat a South African novelist would study the lines of an Irish poet!

Here we see the value of one common orthography in providing linguistic unity and cultural solidarity for peoples of divergent dialects. The political value of such an orthography can be seen in the history of many nations (Germany, for example) where a standard 'national language' was used to unify a multitude of diverse speech communities. There is an obvious economic value as well. It is cheaper to have one orthography and one literature to serve many dialects, than it is to have separate orthographies and literatures for each dialect.

When dialect variation is so great as to make one orthography for many groups impractical, dialect comparisons should still be made in order to make the orthographies as compatible as possible. This makes it easier for the reader who has developed reading skill in the orthography of one dialect to transfer his skill to that of another (Bromley 1961:81). Young (1962) advocates that languages of the same language family should be phonologically compared in order to standardize orthographies. Again, this would make for maximal ease in the transfer of reading skill (or even teaching skill) to a second language.

2.2 The advantage of a multidialectal orthography over a unidialectal one

Sarah Gudschinsky (1973:137) states that when designing an orthography, it is not wise to mix dialects, since the results will probably please no one. Thus she sees the disadvantage of a multidialectal orthography as being that it is artificial. Since it is not the way anybody speaks, it will please no one. She favors a unidialectal orthography modeled after the one most acceptable dialect in the language.

The approach I am suggesting is not one of dialect mixture, but one of dialect comparison to discover levels of phonological structure

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at which skewed phonemic systems converge (Principal 5). By lifting an insistence on 'phonemic' orthographies, we may be able to discover a solution at a phonetic, morphophonemic, or fast speech level which finds agreement between all dialects, whereas the phonemic solution would find disagreement. When such a solution is possible, the result is an orthography which is both multidialectal and the way everybody speaks.

It was Myron Bromley (1961:76) who first suggested such a type of multidialectal orthography. He saw that even though the phonemic systems of the Dani dialects (Irian Jaya) were skewed, if sound correspondences at the phonetic level were symbolized a great deal of convergence was achieved. Bromley's objective was "to develop local orthographies which make cross-dialect comparison and reading maximally easy."

Here I expand Bromley's original idea to include searching for phonological convergence at the morphophonemic and fast speech levels, as well as the phonetic. His original objective of ease in cross-dialectal comparison and reading is developed into one of overall least effort for the learners of the orthography (see principle 7). The orthography arrived at by following the seven Principles should be the one which requires the least effort to learn to use, when effort is averaged for members of all the dialect groups involved. Least effort implies shortest time needed to learn and highest percentage of persons who succeed in learning. It is at this point that a multidialectal orthography has advantage over a unidialectal one; the overall effort of the best multidialectal orthography will generally be less than (at worst, equal to) the overall effort of the best unidialectal orthography.

3. PRINCIPLES OF MULTIDIALECTAL ORTHOGRAPHY DESIGN

By following the seven principles outlined in this section, one should be able to design a least-effort multidialectal orthography for a group of dialects. The principles are not limited in their applicability to multidialectal orthographies only. Principles 1 through 4 and Principle 7 can be followed in designing an orthography for only one dialect. All of the principles can be applied to the problem of

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creating a unidialectal orthography for use by many dialects. In this case, the least effort criterion would indicate the best dialect out of the many on which to base the orthography.

The statement of these principles is preliminary at best. No doubt there are important considerations which have been omitted, and unimportant ones which have been discussed. Further investigation and field testing should suggest refinements in the method proposed here.

3.1 Principle 1—social acceptability

When given a number of alternative solutions to an orthography problem, the solution which is the most socially acceptable is to be preferred.

At the one extreme, a totally unacceptable solution cannot be tolerated. If the solution to a single orthography problem is totally unacceptable it may lead to the rejection of the whole orthography. At the other extreme, that of total acceptability, there is no problem. A solution that is totally acceptable will meet with no opposition and the orthography will be readily used. In between, the answers are not so obvious. There may be many degrees of social acceptability. For instance, a solution may not be acceptable to the minority who are literate in the national language, though it is perfectly acceptable to the majority who are not. Here the linguist must determine if it is more important to follow the wishes of the influential minority. Many linguists have found this necessary (see, for example, Phillips 1973). When considering social acceptability within a group of dialects, the problem can become even more complex. A solution could be acceptable in some dialects while unacceptable in others. Here one must rank the overall acceptability of different solutions by considering the size, location, and prestige of the dialect groups.

In any case, the solution which is the most socially acceptable is to be preferred. In a very real sense, social acceptability is the overriding principle of all the seven; where there is no acceptability the solution cannot be tolerated, regardless of its linguistic or pedagogical desirability. However, a solution which is partially acceptable, but not the most acceptable, can be tolerated if the other principles suggest that it is the best solution.

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3.2 Principle 2—psycholinguistic acceptability

When given a number of alternative solutions to an orthography problem, the solution which is the most psycholinguistically acceptable is to be preferred.

The practice of psycholinguistic testing of orthographies is a common one. In essence, psycholinguistic testing attempts to determine which solution is the most 'psychologically real' to the speakers and prospective readers of the language. When the linguist is not able to decide the proper solution to a phonemic analysis problem or wonders about the best way to symbolize something in the orthography, it is very helpful to present the alternative solutions to the native speakers to determine which one they feel is "right.".

The phonemic level is not the only psychologically real level of phonological structuring. The phonetic level is also psychologically real. This is evidenced by the fact that native speakers of a dialect react to the 'funny' accents of outsiders. They may not be able to define precisely what is different, but they nevertheless react to it as a real difference. In some cases, the phonetic level may be the most psychologically real level in the minds of the speakers. This is in evidence when speakers of a language (generally ones that are literate in other languages) insist that allophones of a single phoneme in their language be represented by separate orthographic symbols (see for example Phillips 1973). The phonetic difference of the phones is more real to them than the phonemic sameness.

The morphophonemic level may be the most psychologically real level in certain cases. This is true with the plural morpheme in English. Following voiceless stops the morpheme is realized as the phoneme /s/, for example, /kits/ 'kits'. Following voiced stops the morpheme is realized as the phoneme /z/, for example, /kidz/ 'kids'. In other positions, /s/ and /z/ are contrastive phonemes. Here they are morphophonemically conditioned variants. Few speakers of English realize that the sounds at the end of kits and kids are different. The sameness of the morpheme is more real than the differentness of the phonemes.

The fast speech level is also a psychologically real level. Though our literary tradition does not allow it, one often sees such spellings

as 'Wanna go?' for 'Want to go?', and 'I've gotcha!' for 'I have got you!'. In these cases, the fast speech level is more real to the writer than the normal speech phonemic level.

The general principle of psycholinguistic acceptability does not presuppose a 'phonemic' orthography. The principle of psycholinguistic acceptability requires that the most psychologically real solution be selected.

3.3 Principle 3—minimal potential ambiguity

When given a number of alternative solutions to an orthography problem, the solution which makes the greatest contribution toward the resolution of potential ambiguity is to be preferred.

Ideally, an orthography should minimize the potential ambiguity of words in context. One drawback of choosing not to distinguish phonemes with low functional load is that it may increase the potential for ambiguity. Gudschinsky (1973:120-122) discusses some of the great difficulties which ambiguities create for the beginning reader. However, the proficient reader can tolerate much more potential ambiguity because his comprehension of the total context will serve to disambiguate the meanings of specific words.

3.4 Principle 4—simplicity

When given a number of alternative solutions to an orthography problem, the solution which yields the simplest orthography is to be preferred.

Powlison (1968:80) discusses simplicity as one of four key characteristics of an efficient orthography. He makes the point that 'no writing system completely represents the total phonemic system of its language, nor is such total representation necessary or desirable for an efficient orthography' (1968:77). Imagine an English orthography in which stress was marked and intonation contours were marked by assigning a pitch level to each syllable. Further meaning could be conveyed by indicating speed, volume, and tone of voice. The resulting orthography would confuse more than it would clarify, even though it would unambiguously communicate much fuller meaning. There is a point at which symbolizing additional contrasts, whether

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they are segmental or suprasegmental, has no advantage and is more detrimental than helpful.

Thus we see that the simplicity of an orthography is related to its readability; symbolizing too many contrasts may clutter and obscure the written message. Simplicity is also related to the teachability (and learnability) of an orthography. Each additional symbol in an orthography is an additional item that must be taught and learned.

Of course the other side of simplicity is minimal potential ambiguity. Anytime an orthography is made more simple, the potential for ambiguity is increased. Anytime potential ambiguity is decreased by introducing an additional symbol, the orthography becomes less simple. There is a constant oscillation between simplicity and minimal ambiguity, and a balance must be found.

In some cases measures can be taken to combat the potential ambiguity introduced by a simplification of the orthography. If the simplification results in the loss of contrast in only a few key pairs of words, Powlison (1968:80) suggests that the contrasts "can sometimes be restored by making arbitrary spelling distinctions between the resulting pairs of homonymous words." One could also use a paraphrase to avoid potential ambiguity whenever it would arise in a written text.

3.5 Principle 5—convergence of skewed systems

When given a number of alternative solutions to an orthography problem, the solution which finds a level of phonological structure at which skewed systems converge is to be preferred.

Under principle 2, psycholinguistic acceptability, we discussed the fact that the phonetic, phonemic, morphophonemic, and fast speech levels of phonological structuring are all psychologically real. Ideally, the orthography represents the level that is the most psychologically real in any given instance. When there is a skewing of phonological structures between dialects this is not always possible. The most psychologically real solution in one dialect need not correspond to the most psychologically real solution in another dialect. In this situation, the linguist has at least two options: (1) adopt the ideal solution for the mo[illegible]mportant dialect, or (2) attempt to find a

common solution at a level of phonological structure other than the most psychologically real one.

Principle 5 states that the second option is the preferred one. The first option, though it gives the ideal solution in one dialect, forces the speakers of the other dialects to master that aspect of the orthography by rote techniques; they are forced to memorize. The second option, however, requires no memorization. The solution, though it may not be at the most psychologically real level for either group, is based on a psychologically real level of structure for both groups. As such, the solution is internalized in the linguistic competence of speakers from both dialects. Learning should be relatively easy for both groups; under the first option, learning is easy for one group but hard for the other.

Pike discusses the ramifications of this principle at the phonetic level. He states (1947:209) that representing conditioned allophones of a phoneme with separate symbols is not a very serious error, for "the native, even though he may not hear the difference, can nevertheless build up a mechanical rule which tells him when to use the one symbol or the other; it does not demand the memorization of an arbitrary list of words." Another possibility is that a mechanical rule will not be necessary at all; the speaker may become aware of the phonetic difference after it is pointed out. In either case, since the phonetic units are internalized as part of the speaker's phono-logical system, no memorization is required.

> To illustrate convergence at the phonetic level, I will use the data given by Bromley (1961) in his attempt to design a multidialectal orthography for the Dani language of Irian Jaya. Among the eight dialects which he discusses, there are two main patterns for the stop phonemes. Lower Grand Valley Dani has one stop series and two voiceless continuants, while the other seven dialects have two stop series which correspond to these. To represent the pattern of the seven dialects I will use Western Dani. The problem comes in that the correspondence between the two series of stop phonemes in Western Dani is not one to one with the stops and continuants of Lower Grand Valley Dani. The correspondence may be diagrammed as:

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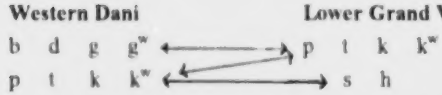

That is, words in Western Dani (WD) containing the voiced stops will have their voiceless counterparts in Lower Grand Valley Dani (LGV). The voiceless stops in WD will occur in LGV either as the same voiceless stop or as /s/ or /h/—WD /t/ corresponds to LGV /s/ and WD /p, k, kw/ correspond to LGV /h/. The skewing between the phonemic systems of the two dialects is apparent and to model the orthography after one system or the other would create many difficulties for users of the other dialect.

Bromley found that if these skewed phonemic correspondences were compared at the phonetic level, the result was a convergence of the patterns into a one-to-one correspondence between phones. The voiced stops of WD (which are phonetically prenasalized) correspond to the initial allophones of the LGV stops which are voiceless and unaspirated. The intervocalic and final allophones of WD (which are continuant and unreleased, respectively) correspond exactly to the intervocalic and final allophones of the LGV stops. The initial allophones of the WD voiceless stops (which are aspirated) correspond to the LGV /h/ and /s/ as described previously. The resulting correspondences, along with the orthographic symbols suggested by Bromley (1961:77-8) can be diagrammed as:

	Western Dani					Lower Grand Valley Dani				
	^{m}b	^{n}d	^{n}g	$^{n}g^{w}$	↔	p	t	k	k^{w}	initial
intervocalic	b	r	g	g^{w}	↔	b	r	g	g^{w}	intervocalic
final	p	t	k			p	t	k		final
initial	p^{h}	t^{sh}	k^{h}	k^{wh}	↔	h	s	h	h	

Proposed Orthography

b	d	g	gw
p	t	k	kw
ph	ts	kh	kwh

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Principle 5 works at the morphophonemic level when different dialects have different phonemic realizations of the same underlying morphophoneme. In this case, the principle requires that the morphophonemic level be symbolized in the orthography. The readers will then have the opportunity to apply the phonemic realization rules.that operate in their own dialect without being confused by the realization that is already printed on the page. We can illustrate this with a simple example from the Biliau language of the Madang Province, Papua New Guinea (from personal field notes). There are two main dialects of Biliau, the eastern and the western. The following is a paradigm of the word `forehead' in the two dialects with the singular possessive suffixes. The forms are given in a phonemic orthography.

Eastern	**Western**	
damow	damow	`my forehead'
damom	damom	`your forehead'
damoy	damay	`his forehead'

This kind of difference in the third person form is common throughout the language. The orthography problem here is whether to follow the eastern or the western dialect in spelling the word. The eastern spelling of *damoy* would cause some confusion to the western readers, and the western spelling of *damay* would cause some confusion to eastern readers. This problem of a skewing at the phonemic level is resolved at the morphophonemic level, however. By comparing the third person form of the western dialect with the first and second person forms we see that the final vowel of the root has a morphophonemic alternation between the phonemes /o/ and /a/. By comparing them with the eastern forms in which the root final vowel does not vary, we posit that the vowel at the underlying morphophonemic level is /o/. The alternation with /a/ in the western dialect is conditioned by the /y/ suffix. Thus we see that the skewed phonemic patterns converge to the single vowel /o/ at a morphophonemic level. By principle 5, then, the *damoy* solution is to be preferred to the *damay* solution, and each reader can make his own phonemic realization of the written morphophonemic form.

An example of principle 5 working at the fast speech level is also found in the Biliau language. In both the eastern and western dialects of the language, the five vowels /a, e, i, o, u/ occur, plus the

double vowel /aa/. /aa/ is pronounced with a lenis glottal stop separating the two vocoids—that is, /maan/ 'bird' is pronounced [ma?an]. The fact that /aa/ contrasts with /a/ is shown by the following minimal pairs from Biliau village (western dialect).

wag	'canoe'
waag	'drum'
sam	'canoe outrigger'
saam	'sky'
mam	'father'
maam	'a species of fish'

In the eastern dialect, /oo/ and /ii/ occur as well.

diig	'stick'
wiil	'yam'
aroor	'net bag'
yidoom	'night'

The complication comes in the fact that where one dialect has a double vowel, the other dialect may not. This lack of agreement between dialects seems to be the rule rather than the exception, as the following examples illustrate.

Western	**Eastern**	
baal	bal	'dove'
dagalaaw	dagalaw	'my thigh'
aay	ay	'tree'
gab	*gaab*	'gather'
kak	*kaak*	'elder brother'
sam	*saam*	'canoe outrigger'

This is a clear example of skewing between the phonemic systems of the two dialects. If a phonemic solution from one of the dialects is chosen, speakers of the other dialect will have difficulties with the orthography. When reading, /a/ could be either /a/ or /aa/, and /aa/ could be either /a/ or /aa/. For writing, the problem is even worse. To learn how to spell words with /a/ or /aa/ could be done only by memorization.

At the fast speech level, however, there is a convergence of phonological structure and a common solution. In fast speech, the dou-

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ble vowels are pronounced as single vowels. The phonemic contrast between double and single vowels is neutralized at this level. Thus the /baal/ of the western dialect and the /bal/ of the eastern dialect are both realized identically as [bal]. Therefore, to represent all double vowels as single vowels in the orthography, results in a solution in which the standard spellings are phonologically correct (at the fast speech level) for both dialects.

3.6 Principle 6—phonemic contrast and neutralization between dialects.

When given alternative solutions to an orthography problem involving phonemic contrast and neutralization between dialects, the solution which symbolizes the contrast is to be preferred for the sake of the reader, while the solution which symbolizes the neutralization is to be preferred for the sake of the writer.

When comparing the phonemes of two dialects, it is often the case that what is one phoneme in one dialect will appear as two different phonemes in the corresponding words of the other dialect. This is what is meant by phonemic contrast and neutralization between dialects—what is contrasted phonemically in one dialect is neutralized in another.

An example of such a situation is found between the two dialects of the Biliau language. In the western dialect /d/ and /z/ are separate phonemes. In the eastern dialect only /d/ occurs; every occurrence of /z/ in the western dialect has /d/ in the corresponding word from the eastern dialect. The /d/ has no allophones in either dialect. The following examples illustrate the contrast in the wesern dialect and the neutralization in the eastern dialect.

Western	**Eastern**	
damom	*damom*	'my forehead'
zamom	*damom*	'rotten'
der	*der*	'a cold wind'
zer	*der*	'grass skirt'
badi	*badi*	'get up'
bazi	*badi*	'feather'

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The principle states that the solution which symbolizes the contrast is to be preferred for the sake of the reader. Thus if /d/ and /z/ are both symbolized according to the usage in the western dialect, the solution favors the readers. In the western dialect there will be no difficulties either reading or writing, since the solution is phonemic for them. In the eastern dialect this is not so. Writing will be difficult since the only way they can learn standard spellings is to memorize them. Reading will not be difficult, however. Every time they see a /z/ they are taught to pronounce a /d/. Thus the overall advantage is toward the reader.

The solution which symbolizes the neutralization is to be preferred for the sake of the writer. Thus if only the /d/ symbol is used according to the usage in the eastern dialect, the solution favors the writer. In the eastern dialect there will be no difficulties either reading or writing since the solution is phonemic for them. In the western dialect this is not so. Reading will be more difficult because every time they encounter a /d/ they must determine if it is phonemically a /d/ or a /z/ for them. Writing will not be difficult, however. They will use the /d/ symbol for both the /d/ and the /z/ phonemes. Thus the overall advantage is toward the writer.

In the case of phonemic contrast and neutralization between dialects, we see that there is no one best solution. There is a conflict of interest between favoring the reader and favoring the writer. The linguist must determine which is more important in the specific situation.

3.7 Principle 7—overall least effort

When given a number of alternative solutions to an orthography problem, the solution which promises the overall least effort is to be preferred.

Overall effort is measured by the amount of time required for an illiterate to become fluently literate. Once a reader has become fluent, there is no effort involved in an orthography. This is evidenced by the fact that the fluent reader of English or Chinese can read just as well as any reader of a 'phonemic' orthography. The effort involved in an orthography is in learning to use it. If the English orthography were strictly phonemic, there would be no need in

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American schools to still be having spelling classes in the eighth grade.

The greater the overall effort required to master an orthography, the greater is the overall cost of conducting a literacy program. This cost is realized in at least two ways: the cost of losing students and thus failing to produce readers, and the actual expense in terms of time, teachers, and equipment required for conducting the program. The cost in terms of losing students is the more serious. Ability to succeed in becoming a fluent reader is largely governed by motivation. In a very real way, the effort required to learn can affect one's motivation. Difficulties and long periods without any seeming progress can lead to frustration and discouragement. These in turn may lead to loss of motivation and giving up. The less time and effort required to gain mastery, the greater the chances that the individual student will succeed.

4. A QUANTITATIVE METHOD FOR COMPUTING OVERALL EFFORT

Now we consider how principles 1 through 6 relate to the principle of least effort. As we consider each of the principles, I will suggest a method of quantifying the relative effort required by each of the solutions. The method is still very tentative. It is hoped that the input received from field studies using this method will be able to suggest refinements.

The results of the relative effort computations are recorded in a table. The rows of the table are labeled with the possible solutions being considered. For each of the dialects being considered there is one super-column. Each of these super-columns is subdivided into seven columns—one for each of the first six principles and a final one for recording the total effort for the dialect. A sample record sheet for a problem with three solutions and three dialects is as follows.

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Table 1. Sample Record Sheet

	Dialect A							Dialect B							Dialect C							Overall Effort			
Principles	1	2	3	4	5	6	T	1	2	3	4	5	6	T	1	2	3	4	5	6	T	A	B	C	T
Solution 1																									
Solution 2																									
Solution 3																									

In the boxes on the record sheet is recorded the relative effort required by a particular solution in a particular dialect with respect to a single principle. In the total columns for the dialects, the sum of the efforts for all six principles is recorded. This then gives the relative total effort required by a solution in that dialect. The overall effort super-column is for summarizing the total effort. The dialect totals are copied into the appropriate boxes and then summed to give the total overall effort, with respect to all the principles in all the dialects, for each possible solution. By principle 7, the solution with the lowest overall effort is the best solution to select.

Now we shall consider the principles one by one and suggest a scale for quantifying relative effort for each principle. In each scale the lowest values represent least effort and the highest values indicate most effort. The scales given here are suggestions to be followed as an initial guideline. In applying the method, the investigator may discover that he needs more degrees in a scale, fewer degrees in a scale, or a different assignment of values to the degrees in a scale. The investigator might also want to weight the effort values. If a particular principle is felt to be more or less important than the others, its effort values could be multiplied by a constant to adjust its weight accordingly. Total effort values for the dialects might also be weighted to reflect the size or prestige of the different dialects. The investigator is encouraged to make any modifications that seem necessary.

Principle 1—social acceptability. A solution which is perfectly acceptable is, of course, the least effort solution; thus it receives a score of 0. A solution which is totally unacceptable is maximum ef-

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fort and is actually an impossible solution. An arbitrarily high value must be assigned to such a solution. The value of 10 is suggested here, but a higher one may be necessary. At least three degrees of acceptability in between can be distinguished: reluctantly acceptable, which receives a value of 1; possibly troublesome, which scores 2; and definitely troublesome, which scores 4. It is felt that the amount of effort required for a definitely troublesome solution as compared to a possibly troublesome one is much greater than the difference of effort required between a reluctantly acceptable solution and a possibly troublesome one. Thus the jump in the scoring from a value of 2 to one of 4.

Principle 2—psycholinguistic acceptability. A solution which is the most psycholinguistically acceptable is the least effort solution and receives a score of 0. A solution which is acceptable, but not the most acceptable, scores 1. A solution which will possibly cause difficulty scores 2. A solution which will definitely cause difficulty scores 4. Finally, a solution which is psycholinguistically impossible scores 10.

Principle 3—minimal potential ambiguity. Increase and decrease of potential ambiguity is calibrated with respect to the dialect being considered. The score of 2, no change in potential ambiguity, means that the given solution neither increases nor decreases potential ambiguity and 0 means a definite decrease in potential ambiguity. Conversely, 3 represents a slight increase in potential ambiguity and 4 is a definite increase. Two degrees of decrease and two degrees of increase are suggested in the case that one solution may offer a greater degree of increase than another, or that a particular solution may show a greater degree of increase in one dialect than in another.

Principle 4—simplicity. Increase and decrease in simplicity, too, is calibrated with respect to the dialect being considered. The score of 2, no change in simplicity, means that the given solution neither increases nor decreases simplicity from what it would be in a complete orthography designed solely for that dialect. The score of 1 means that the solution offers a slight increase in simplicity and 0 means a definite increase in simplicity. Conversely, 3 represents a slight decrease in simplicity and 4 is a definite decrease.

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Principle 5—convergence of skewed systems. The solution at the most psycholinguistically real level is the least effort solution and so scores 0. In principle 5, it is stated that a solution at a common level of phonological structure is to be preferred to a solution which requires arbitrary memorization for at least one dialect. Thus the total effort for a common solution must be less than the memorization one. A solution scores 1 if it is a common level solution for that dialect—that is, it represents a psychologically real level of structuring, yet not the most real level. A solution which requires some memorization scores 3. Thus a solution which finds a common level for two dialects (total effort of 2) is less effort than a solution which is psycholinguistically the best for one dialect but requires some memorization in the other dialect (total effort 3). A solution which requires a great deal of memorization scores 4.

Principle 6—phonemic contrast and neutralization between dialects. Before scoring the effort for this principle, the investigator must determine whether advantage toward the reader or advantage toward the writer is of prime importance. After this has been decided the effort values can be assigned. The score of 2 means that the solution is of no advantage or disadvantage to the reader/writer—it makes no difference. The score of 1 means that the solution is slightly advantageous. The score of 3 means that the solution is slightly disadvantageous to the reader/writer, and 4 means that it is definitely disadvantageous.

A summary of the scales for quantifying relative effort is given in Table 2.

Table 2. Scales for quantifying relative effort

1. Social acceptability
   - 0 perfectly acceptable
   - 1 reluctantly acceptable
   - 2 possibly troublesome
   - 4 definitely troublesome
   - 10 totally unacceptable
2. Psycholinguistic acceptability
   - 0 psycholinguistically most acceptable
   - 1 acceptable

2 possibly difficult
4 definitely difficult
10 impossible

3. Minimal potential ambiguity
0 definitely decreases potential ambiguity
1 slightly decreases potential ambiguity
2 no change in potential ambiguity
3 slight increase in potential ambiguity
4 definite increase in potential ambiguity

4. Simplicity
0 definitely increases simplicity
1 slightly increases simplicity
2 no change in simplicity
3 slightly decreases simplicity
4 definitely decreases simplicity

5. Convergence of skewed systems
0 psycholinguistically most acceptable
1 common level of structure solution
3 solution requiring some memorization
4 solution requiring much memorization

6. Phonemic contrast and neutralization between dialects
0 definitely advantageous to reader/writer
1 slightly advantageous to reader/writer
2 makes no difference
3 slightly disadvantageous to reader/writer
4 definitely disadvantageous to reader/writer

In Table 3 there is a sample overall effort computation for the /d/ versus /d/ and /r/ orthography problem in the Biliau language described under principle 6. Table 4 is a sample overall effort computation for the orthography problem concerning the double vowels in the Biliau language described under Principle 5. The following paragraph explains how the relative effort values were assigned for the first example.

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Table 3. The /d/ and /z/ Problem in Biliau

	Western Dialect							Eastern Dialect							Overall Effort		
	1	2	3	4	5	6	T	1	2	3	4	5	6	T	W	E	T
1. /d/ and /z/	0	-	2	2	-	2	6	1	-	1	3	-	2	7	6	7	13
2. /d/ only	2	-	3	1	-	3	9	0	-	2	2	-	2	6	9	6	15

Table 4. The Double Vowel Problem in Biliau

	Western Dialect							Eastern Dialect							Overall Effort		
	1	2	3	4	5	6	T	1	2	3	4	5	6	T	W	E	T
1. Distinguish double vowels as used in western dialect				4										13	12		
2. Distinguish double vowels as used in eastern dialect				4										13	12		
3. Symbolize all as single vowels				4										13	12		

The problem concerning /d/ and /z/ is primarily one of phonemic contrast and neutralization. There are two possible solutions—to represent the contrast of /d/ and /z/ as is done in the western dialect, or to represent the neutralization with just /d/ as is done in the eastern dialect. Before quantifying the social acceptability it must first be noted that the western dialect has a true ascendancy in terms of prestige. In Biliau, the key village of the western dialect, there is a primary school, a medical aid post, an airstrip, a church, a large trade store, and it is a regular port for a major shipping line in the Madang area. Of a comparable nature, the eastern dialect has only a church and a small trade store. To represent the neutralization would be perfectly acceptable in the eastern dialect but possibly troublesome in the western dialect. To represent the contrast would be perfectly acceptable in the western dialect. It might even be perfectly acceptable in the eastern dialect, though we will score it as reluctantly acceptable.

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It is felt that psycholinguistic acceptability and convergence of skewed systems are not directly relevant to the problem. The problems of acceptability and arbitrary memorization are certainly relevant in one sense; however, they must be gauged either with respect to the reader or to the writer. Results will differ in either case. Since it is primarily a problem of reader versus writer, the scoring of this aspect of the problem is reserved for the principle of phonemic contrast and neutralization.

As to the potential ambiguity, the /d/ and /z/ solution makes no change in the western dialect since this is the phonemic solution in that dialect. However, for the eastern dialect, this solution would offer a slight decrease in potential ambiguity. The /d/ solution, being the phonemic solution for the eastern dialect, would offer no such change for that dialect, though for the western dialect it would entail a slight increase in potential ambiguity.

In terms of simplicity, the /d/ and /z/ solution in the western dialect offers no change since this is the phonemic solution for this dialect; the /d/ solution offers a slight simplification in the orthography. In the eastern dialect, the /d/ solution offers no change since it is the phonemic solution; the /d/ and /z/ solution introduces a slight decrease in simplicity into the orthography for the eastern dialect speakers.

For principle 6, we first determine that the advantage to the reader is more important for our applications than advantage to the writer. In the eastern dialect, the /d/ solution makes no difference since it is the phonemic solution. The /d/ and /z/ solution should also make no appreciable difference to the readers of the eastern dialect; they simply must be taught to pronounce all /z/ symbols as /d/. It should not introduce reading difficulties. In the western dialect, the /d/ and /z/ solution makes no difference since it is the phonemic solution. The /d/ solution would involve a slight disadvantage to the readers for they would have to determine if it was really their phoneme /d/ or /z/.

In the totals for overall effort, we see that the contrast solution has a relative effort of 6 in the western dialect as opposed to 9 for the neutralization solution. In the western dialect, the neutralization solution has an overall effort of 6 as opposed to 7 for the contrast

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solution. Considering overall effort with respect to the whole language group, we see that the contrast solution has an overall effort of 13, whereas the neutralization solution has an effort of 15. Thus by principle 7, the contrast solution—to symbolize /d/ and /r/ according to the usage of the western dialect—is to be preferred.

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"DEAR NOLLY...": RUMINATIONS ON THE EFFECTS AND PRACTICE OF LITERACY IN TRADITIONAL SOCIETIES

Dennis L. Malone

Dennis Malone began working in literacy with the Kaugel people in Papua New Guinea in 1982. He has served as a literacy consultant to the PNG branch as well as to the government there. He and his wife, Susan, were editors of READ Magazine for several years. He is currently at Indiana University in a doctoral program.

[Editor's note: This paper was prepared by Dennis Malone for a Readings in Language Education at the University of Indiana.]

The ten questions that follow have been formed on the basis of issues underlying certain articles appearing in Notes on Literacy (abbreviated as NOL.) and the major issues raised in the readings listed in the bibliography. [Note in passing that I have rejected the possibility of directing the inquiries to "Dear SILLY" (based on SIL) in favor of the less demeaning "Dear Nolly" (based on NOL).]

Dear NOLLY,

Recently I had a discussion (i.e., argument) with a Peace Corps worker in the same language area I work in. I explained to her that by promoting local language literacy, we (i.e., SIL) are helping to preserve local cultures and languages. She said that we are doing just the opposite! Which one of us is right? (signed) ANXIOUSLY WAITING

Dear A.W.,

It all depends on what you mean by "preserving." The linguist Peter Mühlhäusler contends that the introduction of vernacular literacy is as destructive of "traditional modes of expression and life" as would be the introduction of literacy in a foreign language (Kulick & Stroud 1993). If that's true, it would seem your PC friend is right.

However, Mühlhäusler's view echoes what Brian Street (1993) denounces as the desire to preserve tradition as a way to resist change, to "fossilize" a minority language and culture. If she truly believes that traditional cultures can be preserved intact, unchanged, then there is no point in continuing your discussion (i.e., argument).

I will assume that she realizes that cultures inevitably change (or she would not have joined the Peace Corps), from within as well as from without. In most traditional societies, literacy is an activity—or a process, or "technology" (Ong 1982)—that arrives from the outside. Both you and your friend seem to see literacy as a kind of self-contained innovation that impacts a culture either destructively or beneficially. The implication is that somehow "literacy" acts—positively or negatively—upon the members of the minority language group who, for their part, play a passive role in the process.

This is the view espoused to some extent by Goody and Watt (1968) and others who ascribe fundamental changes in human mental processes as a result of alphabetic literacy. Ong (1982) contends that the cognitive processes of people from "primary oral societies" (those as yet untouched by literacy) are significantly, irreversibly altered when they acquire the skills of reading and writing.

Others disagree. Scribner and Cole (1988) argue that literacy is a much more complicated process, one which is itself amenable to change as people use it for their own purposes. On the basis of her studies of Pacific cultures, Finnegan (1988) contends that some oral societies have embraced literacy in such a way as to effect an interactive relationship between orality and literacy in which both are altered but still remain valued in the community. Kulick & Stroud (1993) contend that Gapun villagers of Papua New Guinea use the words of Christian scriptures in the same way they used words spiritually in their traditional culture, i.e., as sources of power, not as vehicles for a message.

In other words, literacy is not an autonomous technology but a socially constructed process (cf. Cook-Gumperz 1986; Heath 1983; and others). People themselves are acting upon this new technology, shaping and forming it to fit their own needs and desires (which may not be what you, the literacy specialist, intended or desired). Yours, therefore, is not a question of "who's right?" so much as a question of what is literacy's

relationship to the society and culture in which one lives and works. Whether or not the language and culture will continue as components of a dynamic, viable society is a complex process of which literacy is a potentially significant factor.

Dear NOLLY,

We are working among ethnolinguistic minorities that have only a relatively recent history of contact with literacy. The national government is asking us to help plan a literacy program for the whole country. Which is better: a nationwide mass literacy campaign over a relatively short period of time, or a community-based program that may take years? What would you do? (signed) TWO CONFUSED

Dear T.C.,

Your question is much larger than I can adequately handle in a "Dear Nolly" column. Allow me to put aside my own questions regarding your available resources, time constraints, available personnel (trainers as well as trainees), transportation, etc., and concentrate simply on the choice in program methodology.

H.S. Bhola (1984) is probably the most articulate spokesperson for the "campaigning for literacy" model. Underlying the campaign approach is a sense of urgency about illiteracy. Campaigners judge illiteracy to be a mammoth problem that requires a proportionately massive response. In their view, small local programs, community-based or otherwise, are piecemeal and ineffective. The phrase "eradication of illiteracy" abounds and Bhola cites one author who characterizes that effort as not only "an end in itself, but as an end which must be attained at once and at all costs..." (1984:31). The advantage of the mass campaign is that, because it sets out a specific, not-too-extended time frame, resources are more readily allocated to it, personnel are more readily committed to it, and the objective of universal adult literacy is more likely to be attained. (1984:35) Bhola also includes accounts of mass literacy campaigns in eight countries: the former USSR, Viet Nam, China, Cuba, Burma, Brazil, Tanzania, and Somalia.

But there are those, myself included, who wince a bit at the condition of not being literate, couched in a phrase usually reserved for plagues

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and fatal diseases. Brian Street (1987) characterizes the mass campaign approach as impervious to the varieties and complexities of local literacies. By Street's estimation, this method implies that the diverse ethnolinguistic minorities are cultures so shallow and unimportant as to be readily accommodated by a single large-scale campaign (often with a single set of materials).

Rogers (1992) suggests another problem with mass campaigns. According to his "five-fold model" of adult learning for development, an innovation begins with the "existing state" of the community(ies), moves then to a stage of "awareness" of a need for change, then to the development of "knowledge, skills, and understanding,," and then on to the "direct action" designed to bring about the "desired change." According to Rogers, mass campaigns, because of their self-imposed time constraints, necessarily shortchange the education and training stages that results in "knowledge, skills, and understanding" (1992:121). As a result, the literacy that mass campaigns produce doesn't last.

Personally, I agree with Rogers and Street. Community-based programs take longer, but they have the potential to survive once the initial "push" is over. They can survive because they depend upon community members to plan, staff, support and evaluate the programs. The adult educators or literacy specialists may leave (almost certainly will leave) but the trained community leaders will remain. They're already home.

P.S. Check out Robert Arnove's chapter in *Perspectives on Literacy*, for his evaluation of "The Nicaraguan National Literacy Crusade of 1980."

Dear NOLLY,

Unesco always emphasizes the need to promote functional literacy, literacy that can be of immediate use to adult neo-literates to improve their life situations. Do you agree with that emphasis? (signed) FUNCTIONALLY PERPLEXED

Dear Funky,

Maybe. It depends what you mean by "functional literacy." And finding the definition is a circuitous process. Do you have a few minutes?

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Kenneth Levine (1982) has written an interesting article in which he points out that "functional literacy" is often "used to justify everything and anything connected with basic skills education for adults" (1982:249). The meaning of the phrase has become elastic.

Levine traces the history of "functional literacy" as a term, showing its roots in a desire "to obtain the active participation of the people themselves in shaping their own future" (1982:251). But as Unesco worked toward implementing a large-scale assault on world illiteracy, the definition of "functionally literate" also changed. Unesco defined a functional literate as a person whose literacy abilities allow that person to participate in the literacy activities considered normal in that person's society, and then (probably for the purpose of quantifying the world literacy situation) equated functional literacy to three years of formal schooling. Then, in conjunction with Unesco's Experimental World Literacy Program (EWLP) in 1964, functional literacy became closely linked with economic development. Your definition derives from Unesco's 1965 Final Report from the Tehran Conference: "The very process of learning to read and write should be made an opportunity for acquiring information that can immediately be used to improve living standards" (1982:254).

But, as you are probably aware, the EWLP failed rather spectacularly to reach its goal, and, by 1975, had enabled only 12 percent of the one million illiterates involved to gain "functional literacy." This failure was attributed to too great an emphasis on the economic component. "'The concept of functionality... comprises not only economic and productivist dimensions...but also political, social, and cultural dimensions'" (1982:255-56).

Levine associates the appeal of "functional literacy" to the theory of "human capital" that was in vogue in the 1950s and 1960s. This theory produced the misconceptions about literacy and economic development that scuttled ELWP, namely, that a literacy level above functionality earns money and that the more literate a society has the greater its per capita value. But Levine points out that the "value" of literacy is more likely to go down than up when diffused across the population. The minimal levels of literacy implied in "functional," if achieved, are unlikely to change anything. He cites Hirsch's analogy that "once some people stand on tiptoe in order to get a better view, others will be forced

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to do the same, everyone ending up in their original, relative positions" (1982:259).

Another difficulty arises when the social aspects of literacy are taken seriously. Literacy is socially constructed. (Cook-Gumperz 1986, Heath 1983, Finnegan 1988, Scribner and Cole 1981, all present compelling evidence for this view from widely different contexts.) Literacy is a two-way process and "cannot be reduced to the question of the fluency with which an individual is capable of reading a newspaper," it is also and equally a matter of the information the newspaper contains" (Levine 1982:263). Thus, literacy is seen as the ability to obtain and exchange written information; and functional literacy becomes "the possession of, or access to, the competences [sic] and information required to accomplish those transactions entailing reading and writing in which an individual wishes–or is compelled–to be engage" (Levine 1982:263-264).

This newer definition of literacy also affects the definition of illiteracy; people are illiterate if they do not possess or have access to the information they need. Authors, too, can be "illiterate" if what they write deceives, obscures, or misleads. (I am reminded of Pa Joad's comment in Steinbeck's *Grapes of Wrath* in which he observed that he didn't know much about the value of literacy but every time someone showed up to read him a piece of paper, something was taken away from him!)

But we still have unanswered questions. Kazemek (1985) contends that literacy is not simply a transaction. It also entails poetic and expressive functions: "...my conception of functional literacy includes the ability to act within the world of texts" (1985:334). Her own experience also questions the notion that, for the neo-literate, poetic and expressive functions must be relegated to some post-literacy future. But Kazemek's literacy is an on-going process that requires significantly more time than is usually accorded functional literacy programs.

The issues Kazemek raises are the same as the lofty definitions with which Unesco began its affair with functional literacy (Levine, 1982:251). Hers are the concerns of a person reared in a literate society, with a literate bias that can barely imagine a people who cull deeply satisfying "poetic" and "expressive" treasures from their own oral traditions.

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So, to answer your question, I do agree with the emphasis on functional literacy, provided that its implementation takes into account the functions that members of the society need and want.

Dear NOLLY,

What kind of impact is our introduction of literacy likely to have on the way the people in this traditional Melanesian society think? (signed) CONCERNED IN NEW CALEDONIA

Dear CINC,

A good question, but the jury's still out. The scholars who have studied the effects of literacy on cognitive development in general have arrived at varying conclusions. There are only a few who have dealt specifically with traditional societies. Perhaps our best approach will be for me to summarize some of the latest findings (both theoretical and practical), share with you some of my own thoughts and experience, and then let you pick out what seems to apply best to your own situation.

Lev Vygotsky and Alexander Luria, two Russian pioneers in the field of cognitive psychology, arranged an expedition in the 1930s to Soviet Uzbekistan in order "to study the psychological changes that followed the rapid and radical socioeconomic and cultural changes taking place" there. Vygotsky had already theorized that inter-relationship of thought and language held the key to understanding cognitive development in children. He felt that the development of our higher mental functions could be traced to the influence of various sign systems (e.g., written language) which aided ("mediated") that development and which were inextricably connected with the social and cultural context of the individual.*

Luria, who conducted most of the research, found evidence to support Vygotsky's theory by presenting nonliterate, unschooled Uzbekistani peasants with several types of logical reasoning tests, including

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* In that respect, I'm aware of (but unfortunately not familiar with) Andrew Strathern's study of body decoration among cultures in Papua New Guinea which might shed some light on one way traditional people think prior to the introduction of literacy.

syllogisms. (An often cited one, goes something like this: "All bears in the North are white. Rubaskova Village is in the North. What color are the bears in Rubaskova?") Luria found that these peasants were either unwilling or unable to reason from the abstracted premise of the syllogism and make the "logical" deduction. Instead, they would reply only that they did not live in Rubaskova nor had they ever been there, and thus could not answer the question. However, when the same syllogisms were presented to literate members of the collective who had been schooled or formally trained, they had little hesitation in providing the logical deduction ("On the basis of your words, the bears are white"). Vygotsky and Luria concluded that their speculations had been correct and that the introduction of literacy and schooling results in a transformation of cognitive functioning from situation-dependent to abstract.

In the early 1960s, Jack Goody and Ian Watt collaborated on an article titled "The Consequences of Literacy" in which they traced the historical roots of alphabetic literacy (as contrasted with the hieroglyphic literacy of the Egyptians and logographic literacy of the Chinese and Japanese). They concluded that the Greek development of alphabetic literacy led to the intellectual achievements for which Greek civilization is primarily remembered. In fact, they go so far as to propose a direct causal connection between writing and logic. They would probably suggest to you that as New Caledonians becomes literate, they will begin a slow process of developing an historical sense, a critical attitude toward the past (especially toward their myths), social stratification , and a growth in individual, solitary activity.

Walter Ong, a Jesuit scholar, writing after Goody and Watt, contrasted the concepts of orality and literacy. Traditional societies with no significant contact with literacy he terms "primary oral." Although he describes this primary oral state sympathetically and in depth, he nevertheless contends that

> ...orality needs to produce and is destined to produce writing. Literacy, as will be seen, is absolutely necessary for the development not only of science, but also of history, philosophy, explicative understanding of literature and of any art, and indeed for the explanation of language (including oral speech) itself. (Ong 1982:15)

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Ong also contends that writing restructures consciousness because it provides for "context-free" discourse (something Luria's Uzbekistani peasants could not conceive). He also suggests that the introduction of literacy into a primary oral society can have significance not generally considered by those of us from literate cultures, such as regarding writing as having secret or magical power, or regarding it as dangerous.

Paul and Edna Headland, SIL colleagues in Colombia, told me that the Tunebo people there consider writing dangerous enough that members of the society must undergo a ritual cleansing after any contact with paper. In Papua New Guinea, Don Kulick and Peter Stroud [cited in Brian Street (ed.), 1993] contend that the people in the Sepik village in which they did linguistic and ethnographic studies considered various written scripture portions as possessing power aside from the message of the words. These understandings are not necessarily terminal states in regard to literacy; more likely, Ong would consider them simply way stations in the slow transition from orality to literacy.

Following up Luria's findings in the 1970s, Sylvia Scribner and Michael Cole (1981) studied the Vai people of Liberia because the Vai had developed their own syllabary and had been using it for over 100 years. As Vai script was an indigenous literacy, transmitted informally person-to-person, the Vai presented a unique experimental situation: the existence of Vai speakers who were unschooled but literate, allowing the researchers to separate and control the literacy and schooling variables. Scribner and Cole were thus able to follow up on Luria's unsatisfactory research, where schooled and unschooled, literate and nonliterate, young and old were all tested together. Their findings did not support the claim made by Goody and Watt that literacy led directly to context-independent, abstract thought. Rather, their data supported a conclusion that schooling, not literacy, was the probable causal factor, as Vai literates who had had no schooling did not score significantly higher on abstract reasoning tests than did their nonliterate Vai counterparts. I doubt that Scribner and Cole would go so far as to suggest that if you were able to confine your New Caledonian literacy effort to a one-on-one, informal transfer of skills, that the people of those traditional societies would experience no significant cognitive change. All they are willing to conclude, and rightfully so, is that they did not find significant cognitive change among unschooled Vai literates.

I hope that this brief (a relative term) overview of current thinking is helpful. I have personal concerns for the characterization of primary oral people's cognitive functions as somehow inferior to those of us who come from literate cultures. Once, while attending an interclan event with Rambai Keruwa, an articulate and highly respected mother-tongue Kaugel man, fluent in English and in Tok Pisin, a national lingua franca, I asked what was being said by the elders of the clans as they spoke. He replied that he could not pick up the gist of the discussion because, understanding all the words, he could not catch the meaning because of the intricate and obscure metaphors and plays on words that were being used. I imagine that a high degree of cognitive ability is required in the construction of the oral labyrinths that have been described to me.

I include that observation in this reply because whatever the impact of literacy as a technology upon the cognitive functions of the people you serve, their preliterate intellectual attainments ought to insure them against being expected to expend the time and energy required for literacy acquisition before there are texts for their eyes that bring them thoughts and words more profound and meaningful than those they formerly received only with their ears.

Dear NOLLY,

Is it necessary that a literacy program for adults in a preliterate society include both reading and writing? I mean, can we just teach reading? (signed)

ONEORTHEOTHERORBOTH

Dear O,

I am curious why you ask that question. My first reaction is to ask, "Do the people want to read and not to write?" I mean, don't reading and writing "go together"? Not necessarily. At least, not in 17th century Sweden.

Graff sketches a "success story" of mass literacy in Sweden following the Lutheran Reformation. There the church and state joined to make literacy a legal requirement. "Within a century, remarkably high levels of literacy existed–without any concomitant development of formal

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schooling or economic or cultural development that demanded functional or practical employment of literacy, and in a manner that led to literacy defined by reading and not by writing" (Graff 1987:13).

(My only quarrel with the passage above is that the Swedish literacy is described as lacking any "functional or practical" use in their society. I assume that is because the sole reading material was the Bible and church-related tracts and catechisms. And, if the people only read them because it was legislated that they read them, or if they only read them for amusement, I probably would agree. But I suspect that they—at least some of them—read because they wanted to know what to do and how to speak and how to think, each day, in their real-life world, and they believed that the words they read were trustworthy guides. How is that, then, less practical than someone reading the directions on a label of insecticide? Forgive me. I digress.)

Closer to our time and place, Scribner and Cole (1981) report that, although reading and writing "were inextricably linked" and that "people who indicated they could read Vai also reported that they could write it" (1981:67-68), the Vai specialists who helped evaluate the demographic information being obtained insisted that reading, rather than writing Vai, be the only criterion for establishing whether or not a Vai person were literate.

Writing requires certain cognitive skills that are acquired with difficulty. Scribner and Cole cite Vygotsky's observation that the written message is "speech without an interlocutor"—that the writer must, along with his/her message, explain the context in which the message is being delivered in order to be intelligible (1981:204).

Heath (1983) describes the many social and practical uses to which reading and writing are put by the residents of a rural community in South Carolina. In one example, she relates how Trackton people will take a defective item back to the store and be told by the manager that it is not the store's responsibility, "You'll have to write to the manufacturer." The people return home and assure their neighbors that they won't ever patronize that store again, but no letter is ever written. (Today, perhaps, it doesn't need to be written if the manufacturer has an 800 number...but that's a whole different issue!)

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But in the end, it must be the people themselves who decide whether or not their current and foreseeable future situation requires writing literacy as well as reading literacy. Different groups within the community may have different needs. In the Kaugel language area of Papua New Guinea, for example, Christian evangelists and pastors requested a literacy class to help improve the fluency of their oral reading of scriptures on Sunday mornings. They expressed no need or desire to practice writing.

Dear NOLLY,

I spent a lot of time and effort developing a culturally sensitive primer for use with adults in the Fululianpoc literacy program, but none of them are interested in using it to learn to read. They say they want to learn to read and they start, but no one ever finishes. What could be the cause of their lack of interest? (signed) WORRIED & WORNOUT TOO

Dear WW II,

Let me begin by reassuring you that you are not the first outsider to develop a primer that doesn't "resonate" with the local people. (I am inferring from "developing a culturally sensitive primer" that you are an expatriate literacy worker, as indigenous literacy workers do not usually use the terms like "culturally sensitive." If I'm wrong, please forgive me, and disregard everything that follows.)

Scribner and Cole (1988), who did their research among the Vai people of Liberia, write that their

> ...evidence indicates that social organization creates the conditions for a variety of literacy activities, and that different types of text reflect different social practices. With respect to adult literacy, a functional approach appears more appropriate than a developmental one. The loose generalization of developmental models developed for work with children to instructional programs with adolescents and adults is certainly questionable (Schibner and Cole 1988:69).

A primer approach, even with adult content, is just such a "developmental" approach. Adults generally seek literacy because they

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perceive distinct needs within their personal, social and cultural context for literacy skills. You might consider setting your primer aside for the time being and, with the help of your indigenous colleagues, try to discover local uses of literacy.

In my own personal experience among the Kaugel people of Papua New Guinea–a people whose earliest experience with literacy dates from the 1950s–literacy practices include reading their children's "clinic cards" (birth and health records), reading campaign posters and ballots during provincial and national elections, reading letters from children and relatives in distant locations, reading labels and price tags in stores, "reading" playing cards (a popular sign system especially among the men), reading the Kaugel New Testament and church songbooks, marking ballots, writing letters to distant children and relatives, making signs for local trade stores and local commercial vehicles, writing lists of names of people to be compensated at funeral feasts or weddings, and, perhaps, many others. All of these are "real-life" texts that might better serve your adult literacy program than a primer.

The trend today is away from thinking of literacy as an autonomous process, unaffected by local culture or social structure, or as a set of skills and competencies that can be imparted simply by arranging for the appropriate educational format. Paulo Freire, in his book *Pedagogy of the Oppressed*, was one of the first to insist that adult literacy must be a vehicle for the liberation of the exploited sectors of society.

More recently, Alan Rogers proposes that adult literacy ought not to be isolated at all from adult education. Unlike young people, adults do not need to learn in order to become contributing members of society. They already are established members of the society. Therefore, "adult education covers the teaching of literacy to adults but it is much wider than that" (1992:20). Rogers also notes the "concept of distance" that has negatively affected development-related literacy materials in other parts of the Third World.

> Every learner places the material with which they are confronted at a specific location within their own sense of reality. The distance between where they place this new material and where they place themselves is usually expressed in terms of space (it is of 'remote interest' or a matter of 'close concern,'

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> etc.) or in terms of social relationships (it is 'alien,' etc.). If Developmental material (literacy or new farming practices or new habits of hygiene, for example) is placed far from themselves, these practices will be regarded as 'culturally other,' and thus learning them will be more difficult... (Rogers 1992:140)

That is not to say, throw away your primer. Rather, I would suggest—if you haven't already—step back and try to see what Rogers would call the "existing state" of Fululianpoc literacy, and then identify the needs for adult education which adult literacy will serve.

Dear NOLLY,

I am an adult literacy specialist working in an ethnolinguistic minority group in Africa. I know that the introduction of literacy will be difficult. I'd like to make the transition for the adults as smooth as possible. I am unclear, however, whether there is some way that the adult minds can be prepared for the literacy tasks, or whether the necessary cognitive changes are a natural result of the process of learning to read and write. Can you clarify this issue for me? (signed) THOUGHTFUL

Dear T,

Your question implies that the adults you are working with live in what Walter Ong (1982) would call a "primary oral" society. Ong makes a distinction between orality (a term descriptive of all language and culture groups) and primary orality (a term applying only to those persons and societies totally unfamiliar with writing).

Perhaps the best approach here will be to try to understand in general what scholars consider to be the state of the primary oral mind and what changes, if any, are required for the acquisition of literacy skills. Then we'll look at the more practical problem of how to put that knowledge to use.

We'll skip over the "Great Divide" debate that has been going on for the past twenty-five years regarding the nature of the differences between the human mind in primary oral cultures and those in literate cultures, and what causes them. Instead, we'll concentrate on what has

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been discovered with respect to orality. That should give you some cognitive behavior to verify or disprove in the adults that you are working with.

Theorists such as Jack Goody, Ian Watt, and Walter Ong, see a clear, rather large distinction between orality and literacy (ergo, "the Great Divide"). In Goody and Watt's (1968) influential essay, "The Consequences of Literacy," members of non-literate societies are characterized as communicating "all beliefs and values, all forms of knowledge" in face-to-face communication between individuals and groups, knowledge that is stored only in human memory (1968:29). They use the term "homeostatic" to describe a social organization in which only items of social relevance are retained in memory while the rest is jettisoned (1968:30-31). They reject arguments that propose an absolute dichotomy between "the 'mythical' thought of primitives and the 'logico-empirical' thought of civilized man" (1968:43), but suggest that there may be very distinct changes in the mental processes when writing is introduced, mainly in the separation of "history" from "myth" (1968:44). Below are two passages that express what they believe are fundamental aspects of literate vis-à-vis non-literate. The first relates to the ongoing, ever-increasing accumulation of written records and texts in literate societies.

> ...the literate individual has in practice so large a field of personal selection from the total cultural repertoire that the odds are strongly against experiencing the cultural tradition as any sort of patterned whole. (Goody and Watt 1968:57-58)

The second passage is a quote from Tolstoy's War and Peace in which the author describes a non-literate mind-set. Platon Karataev, a peasant

> ...did not, and could not, understand the meaning of words apart from their context. Every word and every action of his was the manifestation of an activity unknown to him, which was his life, but his life, as he regarded it, had no meaning as a separate thing. It had meaning only as part of a whole of which he was always conscious... (Goody and Watt 1968:61)

Ong (1982) points out that although individuals in primary oral societies "possess and practice great wisdom...they do not 'study.'

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> They learn by apprenticeship...by discipleship...by listening, by repeating what they hear, by mastering proverbs and ways of combining and recombining them, by assimilating other formulary materials, by participation in a kind of corporate retrospection—not by study in the strict sense. (Ong 1982:9)

Ong cites Malinowski's observation of another aspect of people in primary oral cultures, namely, that language to them is a "mode of action and not simply a countersign of thought" (1982:32). Oral peoples consider names to convey power. Kaugel people of the highlands of Papua New Guinea rarely divulge their "true" name to strangers for fear that it can then be "used" against them. I read also (I forget the source; perhaps Luria, 1976) that a certain peasant could readily accept the revelation that human scientists had discovered how to measure distances to the stars and how to calculate their weight; what most mystified him was how they had learned the names of the stars! In a similar vein, Kulick & Stroud (1993) contend that Gapun villagers of Papua New Guinea use the words of Christian scriptures in the same way they used words spiritually in their traditional culture, i.e., as sources of power not as vehicles for a message.

Perhaps you can see how a "Great Divide" theory arises from contrasting oral and literate tradition: oral speech is natural, writing is artificial; oral speech has unconscious depths; writing is only a conscious act. (You can talk in your sleep, but you can't write!) The heritage of an oral tradition is passed by word of mouth with the premium on the mnemonic and rhythmic patterns, repetitions, proverbs and formulary expressions that ensure its essential survival. The literate heritage consists of texts that are static and, if preserved, are as open to scrutiny as when they were composed, a feature which often leads to skepticism as inconsistencies and contradictions are perceived.

Ruth Finnegan (1988) presents an interesting view of the orality/literacy debates. She studied traditionally oral cultures in the Pacific and the impact of literacy upon their oral traditions. Her conclusion is that there is simply not enough evidence to support any theory suggesting "definitive consequences for human society and experience" caused either by orality or by literacy (1988:14).

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Moreover, Finnegan investigates the compositional procedures of what she terms "oral literature." (Ong goes ballistic over that term, but it's a red herring here!) If she is correct, the primarily oral society you work in most likely has an oral "literature" which may yield some material for a literacy program.

Finnegan takes issue with four basic assertions that have been made about oral composition: 1) the "text" of an oral composition changes depending on the occasion of its performance; 2) the form of composition is composition-in-the-act of performance (not prior to, or separated from); 3) the "literature" is transmitted in the same way it's composed (i.e., not memorized word-for-word); and 4) no "authentic" or "correct" version exists for items of oral literature (1988:88-89).

Finnegan submits evidence that, at least in the Pacific, there is indeed a rehearsal of oral literature prior to performance in order to get it right, a distinct concern for verbatim memorization, which supports the idea of "authentic" or "correct" versions (or, at least, the version we want to be able to sing publicly together without embarrassing ourselves). She shares an anecdote from Collocott in which a Tongan poet chanted a one-hundred-and-one line original poem as a gift to a poet friend, who then, in response, thanks the giver by repeating the poem verbatim. (That kind of feat of memory, apparently, is only ascribed to the poets, not the average Tongan.)

But I think that the potentially most practical discovery that Finnegan makes is of the interaction between the oral and the literate as they mingled in the Pacific. Rather than support the common assumption that the "technology of writing" is "intrinsically opposed to or even 'kills' oral literary expression, traditional Pacific societies are demonstrating that the writing down of oral traditions (especially during the 19th and early 20th centuries) was a "formative and creative act rather than merely neutral collecting" which eventually "fed into the oral literary tradition. In the South Pacific, it seems, these two were not...two separate and opposed modes but, both now and in the past, form part of one dynamic in which both written and oral forms interact" (1988:122).

The insights from Goody and Watt and Ong should provide you with a better, perhaps more sensitive, understanding of the difficulties facing neo-literate villagers as they try out the technology of writing and read-

ing. For a society, the transition from oral to literate is a time-consuming process (e.g., hundreds of years in the West).

Finnegan's perspective, however, can be put to immediate trial. If I were you (or even if I were me, back in the Western Pacific!), I would try persuading a core (corps?) of able-bodied/minded indigenous literate folks to begin recording their oral "literature"—especially the song—and try to work that into the material of their early literacy experience. Their familiarity and deep affective associations with the stories and songs would make that their cognitive adjustment much easier. It's worth a try!

Dear NOLLY,

I just received a request from the Minister of Education here to provide his office with statistics for the number of literates in our language group. At what point is a person judged to be literate? Are there any tests or set of criteria that you would recommend for judging adult literacy? (signed) STATISTICALLY DESPERATE

Dear Stat D,

I 'm glad I'm not in your shoes! (Isn't that a depressing way to start a column designed to help our readers?) This is one of those bad news/not-so bad news situations. It depends who you're talking to (or reading).

For example, John Bormuth wrote an influential (I think) article about 20 years ago in which he sought to develop models for "identifying performance criteria that can serve as the goal of instructional programs and of the research and development programs that lead them" (1973:7). That's the bad news! Bormuth's findings are well suited for Western high-tech societies and, although he includes some very interesting items, e.g. his "taxonomy of literacy behaviors" (1973:19-21), this is not a solution that will make your Minister of Education very happy.

A much easier (but, I think, equally unsuitable) method is the one Unesco used (perhaps, still uses) for developing their literacy statistics. They set (somewhat arbitrarily) a grade of formal education as equiva-

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lent to ("functional") literacy. For example, just prior to the implementation of the Experimental World Literacy Program in 1965, three years of formal schooling was established as the benchmark for determining whether or not a person was literate. That, to me, is also bad news. As you are probably well aware—especially if formal education in your community is done in a language other than the local mother-tongue(s)—many adults who have had even as much as six years of formal schooling will have lost their literacy abilities long since!

The not-so-bad news is that Scribner and Cole (1981), facing a similar situation of needing some kind of criteria for identifying literates for their research purposes among the Vai, developed a two-fold approach. First, they simply asked the adult (or child) if he or she were literate. If they said yes, they marked them as literate. This self-declaration was subsequently verified by a brief test of oral reading comprehension using a short text in the language of their self-declared literacy. In their experience, they found a nearly one-to-one correspondence between those who said they were literate and those who "passed" their test. The test, as I recall it, was scored on a scale of 1-4, so that they could assess relative literacy, but I would imagine that for your purposes you could make yours an is-or-isn't distinction.

Also, if you read Shirley Brice Heath (1983) or Jenny Cook-Gumperz (1986), along with Scribner and Cole (1988), you will probably want to use a text for your testing that corresponds directly with a type of literacy already in use in your community. You will be much more likely to get an accurate estimation of the literacy situation.

Happy quantifying!

Dear NOLLY,

How does the distinction between "schooling" and "literacy" (as pertains to the purpose and effects of literacy) affect adult vernacular literacy programs in Third World countries? (signed) DOWNRIGHT CURIOUS

Dear Downright Cur,

Your question is one of the key elements in the "Great Divide" debate (which I have skillfully avoided—almost—for the last eight col-

umns). The "Great Divide" refers to the putative cognitive gulf that exists between literate and non-literate societies. The distinction between schooling and literacy is one of the more prominent by-products of that debate!

On the hunch that you are already somewhat familiar with the Great Divide theory—else why would you have mentioned the distinction between school and literacy?—let me paint a background in broad strokes.

For many years, scholars have been imputing large, very significant results to the practices of reading and writing. In the 1968 book, *Literacy in Traditional Societies*, Goody and Watt collaborated on a chapter titled, "The Consequences of Literacy" in which they summarily traced the history of literacy. They also came to some conclusions:

> The present argument must, therefore, confine itself to suggesting that some of the crucial features of Western culture came into being in Greece soon after the existence, for the first time, of a rich urban society in which a substantial portion of the population was able to read and write; and that, consequently, the overwhelming debt of the whole of contemporary civilization to classical Greece must be regarded as in some measure the result, not so much of the Greek genius, as of the intrinsic differences between non-literate (or protoliterate) and literate societies... (1968:55) and...
>
> > The kinds of analysis involved in the syllogism, and in other forms of logical procedure, are clearly dependent upon writing, indeed upon a form of writing sufficiently simple and cursive to make possible widespread and habitual recourse both to the recording of verbal statements and then to the dissecting of them. (1968:67-68)

Walter Ong (1982) compiled a book of his essays in which he sought to make clear the distinction between what he called "primary orality" and literacy. However, he stated that, in spite of the power and art of verbal performances in oral cultures, human consciousness could not be extended by primary orality to reach its "fuller potential."

> In this sense, orality needs to produce and is destined to produce writing. Literacy, as will be seen, is absolutely necessary for the development not only of science, but also of history, philoso-

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> phy, explicative understanding of literature and of any art, and indeed for the explanation of language (including oral speech) itself. (1982:15)

Ong extended the "great divide" between non-literate and literate considerably with statements such as this:

> Without writing, the literate mind would not and could not think as it does, not only when engaged in writing but normally even when it is composing its thoughts in oral form. More than any other single invention, writing has transformed human consciousness. (1982:78)

Sylvia Scribner and Michael Cole (1981) published *The Psychology of Literacy* in which they described and evaluated their research findings among the Vai people of Liberia. The significance of their study is that the Vai people are possessors of their own script (a syllabary of some 200 phonetic-characters). Scribner and Cole were working on a hunch (i.e., hypothesis) drawn from the work of Soviet psychologist A.R. Luria who had observed demonstrably different cognitive behavior between non-literate peasants and literate peasants who had been to school or some other type of formal training. Was it literacy that caused the difference, or schooling? The Vai people offered a unique situation in which to seek answers to that question. Many Vai literates had learned their literacy informally (i.e., no school). The results of their investigations disputed the conclusions of the Great Divide theorists like Goody and Watt and Ong.

> Our results are in direct conflict with persistent claims that "deep psychological differences" divide literate and non-literate populations (see Maheu, 1965). On no task—logic, abstraction, memory, communication—did we find all nonliterates performing at lower levels than all literates. . . We can and do claim that literacy promotes skills among the Vai, but we cannot and do not claim that literacy is a necessary and sufficient condition for any of the skills we assessed. (Schibner and Cole, 1981:251)

In short, Scribner and Cole did not find that literacy per se effected any dramatic or distinctive cognitive changes in the Vai script monoliterates. What did they find?

> The most impressive finding is that formal schooling with instruction in English increased ability to provide a verbal explanation of the principles involved in performing the various tasks... Speaking English never substituted for school variables, and on verbalization measures, school—not English reading scores—was the best predictor. (1981:131)

They suggested, therefore, that schooling (Western-style) is a confounding factor when comparing literates and nonliterates, and may well be the cause of the cognitive changes formerly attributed to the affects of literacy.

I am not thoroughly convinced myself. Scholars like Shirley Brice Heath (1983) and Jenny Cook-Gumperz (1986) present persuasive accounts of literacy as a socially constructed activity which contrasts with "schooled literacy" which lend weight to Scribner and Cole's perspectives. And theorists like Harvey Graff (1987, 1988) and Brian Street (1984, 1987, 1993) present revised historical perspectives, in part, on the basis of Scribner and Cole's work.

But it seems to me that the real argument against Goody and Watt is not supported best by the existence of literate people (i.e., the Vai) who do not demonstrate special skill in abstract generalization and logic, but by the existence of people who engage in abstract generalization and logic but do not write! Until those people are identified, the question of the relationship of literacy to abstract thought remains moot (at least, for me).

How does the distinction between "schooling" and "literacy" affect adult vernacular literacy programs in Third World countries? Probably more in the minds of the literacy program planners than in the adult neo-literates. If literacy is a socially constructed activity that adults engage in—not simply a technology acquired through carefully constructed educational activities—that should be reflected in the way in which the program is implemented. The location, the training of instructors/facilitators, the instructional materials to be used or prepared, all of those factors are affected by the your understanding of what literacy is and what it does and how it does it.

But I would advise to you make changes slowly. In my experience, even in the most isolated areas, non-literates have definite expectations

about learning literacy, and schools and classrooms are usually part of them. Before changing that feature, I would work very hard at discovering the kind of literacy skills the people need and use in their everyday, real-life situations, and, as far as possible, incorporate only those learning activities that correspond with them.

I hope that this helps you a bit, or at least gives you some other places to look for help.

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REVIEW

Rice, Robert F. and Carey Jo Wallace. 1992. A guide for Bible-content adult literacy primer construction. Available through Literacy & Evangelism International. About 250 photo-copied 8½" x 11" pages. Cost is $20.00 + shipping.

Reviewed by Ron Anderson

A Guide for Bible-Content Adult Literacy Primer Construction is a good reference book for those working as consultants to church-based literacy programs. It may also be useful for those making primers in isolated locations without access to experienced literacy consultants.

Robert Rice is the founder of Literacy & Evangelism International, which has directed construction of Bible-content literacy primers in over 110 languages. Rev. Rice served with the Korea Presbyterian Mission from 1950 to 1965. In 1967 he taught a graduate course, *Literacy Techniques in Missions*, with Dr. Frank C. Laubach.

The purpose of the guide is to show how to construct Bible-content primers and how to teach them. The author credits Sarah Gudschinsky and Frank Laubach, among others, as sources for the method. The analytic approach to the teaching of syllables appears to draw heavily from what we now call the Gudschinsky Method.

The guide is divided into three major sections:

Part 1. A description of, and rationale for using Bible-content primers in adult literacy ministries.

Part 2. Step-by-step procedures for constructing a primer series.

Part 3. Guidelines for setting up or strengthening adult literacy ministries.

An **appendix** contains a detailed teaching guide and 26 simplified Bible stories that can, after translation, serve as the final primer lessons. These stories begin with the Creation story and end with John's vision of heaven from Revelation.

The Literacy & Evangelism International (LEI) method primers are similar in appearance across languages. According to the guide, "the syllable boxes are at the heart of the LEI method." Every lesson contains picture word boxes, a comparison box, an identification box, a contrast/analogy box, new word boxes,

and mixed syllable boxes. A lesson also contains connected material and a scripture reference for discussion.

The teaching of the primer lessons follows a simple format.

1. Teach the picture words (introduces the words associated with the pictures and teaches new letter(s) in the lesson)

2. Find the picture words (gives sight recognition practice)

3. Teach the boxes (practices breaking words into syllables and then rebuilding them. Also, prepares for new word recognition by reading random syllables)

4. Use the flash cards (checks comprehension–prevents memorizing)

5. Teach the story (practices reading the picture words in sentences and stories)

A section in the book provides models for language analysis worksheets that help organize data. The worksheets ask for inventories of letters, vowels, vowel clusters, consonants, consonant clusters, and special markings for tone, glottal stops, length, or other phonemic phenomena. Worksheets also ask for lists of frequently used verbs and picturable nouns.

Frequency counts and the worksheets form the basis for the lessons. Letters are introduced according to their frequency counts, with two exceptions: (1) a consonant cluster should be introduced before individual parts of the cluster (if possible) and (2) all the letters needed to spell the name *Jesus* in the target language must be introduced by lesson 12. After selecting the order of letter introduction, picture words and connected material follow.

The guide is well organized and, in some places, clearer than primer construction guides by SIL authors. For those following the Gudschinsky method, this book is a good supplement to similar works. Note, however, that this guide focuses more on syllables and is more accelerated than most SIL-produced primers. Also, the LEI method makes no mention of functors, which may be of concern to some literacy workers.

Though SIL literacy specialists are not the main audience for the book, it would be a good addition to an SIL branch literacy library. It seems especially appropriate for national Christian organizations looking for a primer construction method in their own literacy campaigns.

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NOTES ON LITERACY

VOLUME 20.3 JULY 1994

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NOTES ON LITERACY

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Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236
USA

Readers are invited to submit inquiries, comments, or manuscripts for publication to:

Editor of Notes on Literacy
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236.

Submit copies of manuscripts on computer media (MS-DOS or MAC format) along with a paper copy of the manuscript. Please include a brief biographical note with any manuscript.

ISSN 0737-6707

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READING TO LEARN, WRITING TO INFORM: AN INDIGENOUS LITERACY PROGRAM FOR PRIMARY HEALTH EDUCATION

Esther Marmor, Togo/Benin

Tom and Esther Marmor joined SIL in 1974, and began work in the Kabiye language of Togo in 1979. Esther is a Registered Nurse and has a B.S. in Education. This article is an edited version of a paper written in 1991 for a course at the School of Tropical Medicine, Liverpool, England.

1. Introduction
2. Background
3. Literacy and Primary Health Care
4. Literacy Programs (Adult Education)
5. Health Education Modules
6. Conclusion
Appendix
References

1. INTRODUCTION

Primary Health Care is an approach to providing health care in developing countries in a way which involves the local community in the identification of their health concerns and in finding long term solutions, both preventive and curative. High illiteracy rates and linguistic diversity in most developing countries of Africa and Asia present a formidable barrier to Primary Health Care programs.

This paper presents an approach used by the Summer Institute of Linguistics in Africa, integrating literacy in the local indigenous languages with participatory adult health education. The aim of the program is an improved quality of life for the participants, their families and their community. A wide variety of activities are integrated with reading and writing to help the participants improve their lives.

The program seeks to instill the idea of reading to learn so that the participants will benefit from other people's experiences. Similarly they

are encouraged to write to inform so that their own experiences can be shared with others within their community as well as in other communities.

2. BACKGROUND

Health cannot be attained by the health sector alone. This is now a recognized fact by such international development agencies as the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO). Improved health demands multiple approaches: economic development, improved food production and distribution, anti-poverty measures, provisions for safe drinking water, better housing and universal education. Where can one begin? Is there a common denominator, a tool to be used, to begin the change processes listed?

Primary Health Care (PHC) seems to be an exciting step in the right direction. It is an approach to health care based on community direction and participation. It follows the WHO definition of health as "a state of complete social, physical and mental well being and not merely an absence of disease or infirmity." The community identifies its problems and needs, prioritizes them and decides on appropriate means to solve the problems. Health professionals and other groups (donor agencies, religious, cultural, educational) function as resources. The community maintains self determination and responsibility for itself.

The community's definition of health is gleaned through non-structured conversations with friends and tribal leaders, and later group discussions involving different sectors of the community. A study done in the Wahema language group in northeastern Zaire discovered that health care involved seeking the cause of illness as much as giving appropriate treatment. After much community discussion this group of people defined their essential criteria for a healthy family in a variety of surprising ways (see Appendix).

The Village Developing Committee (VDC) is at the center of the program, with the various agencies functioning as helpful resources. Initially the VDC plays a role in defining health for the village. In this pattern, the village people themselves decide what is important and what development, if any, they want to strive for.

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Working under the VDC is a facilitator, someone who offers encouragement and can link the village with appropriate resources. The facilitator functions somewhat like a midwife, assisting with the progress and delivery. This person may be someone influential in the community or even an outsider who has become known within the community and who knows the community fairly well.

In other communities and groups, the exact makeup of the program may differ. The decision making body might be different from the Village Development Committee. It might be a literacy group or church group, a reading club or political unit. The resources may also vary from community to community.

It is important to consider languages in respect to the support system. Information must be given via language (i.e. literature, educational programs, adult education, etc.). In what language should this be done? One learns only if one is able to comprehend what is being communicated. In most of the countries of sub-Sahara Africa this becomes a formidable problem because of the linguistic diversity and the low comprehension of English, French or other widely used languages.

Of necessity the training manuals for the health personnel would be done in a national language. However, for teaching the individuals within the community, health care information in their own language is the most direct and sensible way to go.

Not every group has a written language program but their number is increasing. Furthermore, many indigenous people are being trained to write, even creatively, in their own languages. In 1991 the government of the Republic of Togo had an active literacy program in four languages and the Summer Institute of Linguistics had programs in six more. This paper discusses the implementation of PHC learning materials in the Kabiye language of Togo.

Bordered by Ghana, Benin and Bourkina Faso, Togo with its population of three million is one of the smallest countries in Africa. It belongs to the Economic Community of West African States and maintains strong ties with France.

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In 1988 the Gross National Product was $370 (U.S.), having declined from 1980 at an average of 2.8% annually. Over the same period, the population increased by an annual average of 3.4%.

The principal cash crops are cotton, cocoa and coffee. In non-drought years Togo is self sufficient in basic foodstuffs. The principal subsistence crops are: cassava, yams, maize, millet and sorghum. Livestock are sheep, goats and poultry.

The infant mortality rate in 1987 was 58.7%. The current life expectancy for women is 51 years, for men 49.

Literacy figures in 1981 show that urban males had an illiteracy rate of 24.8%, urban females, 60%. Rural males had an illiteracy rate of 65% and rural females 89%.

French is the official government language while Ewe (south) and Kabiye (north) are the national languages. With some 36 indigenous languages, four of the major languages have government adult literacy programs in place. Attempts are being made to teach primary schools in the two national languages, Ewe and Kabiye.

3. LITERACY AND PRIMARY HEALTH CARE

Literacy is very much on the minds of developing countries. Eradication of illiteracy by the year 2000 is a goal of UNESCO and a significant number of its member states because education (of which literacy is the core) is considered a key factor for development (Wagner 1987).

Primary Health Care when community-based places "man" at the center of development. It works with individuals and groups at the local village level and makes use of the knowledge they already possess and helps them mobilize resources in finding solutions to their health problems.

In what language must this be done? Do we speak to the illiterate village women in the national or trade language? They may listen, but do they understand? A majority of women in remote areas of Togo are monolingual or understand the trade language marginally at best. They may attend meetings, listen, and even nod in agreement--but with very little comprehension. As PHC teaching materials and programs are

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designed, it should be of vital importance to utilize the local indigenous language, particularly in the remote areas. By tapping into existing literacy programs and by using locally literate people for literature production, materials can be produced in many languages at relatively little expense.

4.LITERACY PROGRAMS (ADULT EDUCATION)

Adult literacy programs vary in methodology and materials. *Traditional* literacy programs are primarily concerned with teaching people to master the mechanics of reading and writing. It is assumed that learners will then put their new skills to use. Other programs, often called *functional literacy* especially by UNESCO, take a global approach in which reading and writing are only a part of a general education program usually aimed at social and/or economic aspects of the learners' lives. New information to improve their lives is an integral part of each reading lesson from the very beginning of the program.

A modification of functional literacy is the Integrated Functional Literacy Approach developed by the Summer Institute of Linguistics in Africa. This program begins with Learning to Read and Write and ends with Reading to Learn and Writing to Inform. Three distinct phases characterize the program, with an optional fourth phase featuring transfer to a second language. The following describes these phases:

Phase 1: LEARNING TO READ AND WRITE

> Duration: 3-6 months. Students focus on the mechanics of reading and writing their own language. Content material is culturally relevant.

Phase 2: IMPROVING READING AND WRITING

> Duration: 3 months. Students read culturally relevant materials to develop their reading and writing skills and to begin a search for practical uses for reading and writing. Example: short stories taken from the peoples' lives serve as a basis for discussion and consideration of possible solutions or applications.

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Phase 3: READING TO LEARN, WRITING TO INFORM

Duration: indefinite. Learners read materials designed to help them improve their lives. They expand their writing to inform others. The content is generally information that is new, but adapted to the culture.

Phase 4: TRANSFER TO A SECOND LANGUAGE (Opt.)

Participants learn to speak a second language, usually English, French, or another national language.

It is in phase 3 that instructional modules covering a wide range of topics are designed. Examples are: health topics, child care, agricultural topics, civics, small group business practices, and the like. These modules are designed to build upon the learners' reading and writing abilities and to apply the principle of "reading to learn and writing to inform."

In addition to written materials designed for the learners, audio-visual materials, presentations by the relevant technical or support service, demonstrations, visits to other classes or groups, and class discussion, are important parts of an integrated educational approach. The exact nature of each module will depend upon the nature of the topic and the resources available to the program facilitators.

Each Phase 3 class discusses and decides which topic or topics are of interest to them. This correlates with the PHC concept that the village determines its needs and appropriate care. With a dynamic group leader it is quite possible that some definition of health could emerge from these discussions.

Activities undertaken will depend upon the nature of the class, their previous experience and knowledge of the topic or related topics, their ability to learn and to apply new information from written materials.

Class members can be encouraged to write their experiences for use in rural newspapers or other information sources. Thus other groups may be stimulated to undertake similar learning. For example, class members may write of their own experiences with illness. These can be put into simple publishable form or used as introductions for health modules. A class or group may tackle a particular problem, writing materials as they go along or when the solution is found. This

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experience may be communicated to other groups and on to the next generation.

Such instructional modules can be incorporated into a variety of programs. Any group (churches, workers' cooperatives, political cell groups, etc.) where literates already exist can use the modules of their choosing.

Module development in a national language will provide a resource for producing similar modules in each of the languages. Thus helpful information can be disseminated to people even in very remote areas, to improve the quality of their lives.

5. HEALTH EDUCATION MODULES

Several questions must first be addressed with regard to development of Health Education Modules:

- Who is the target audience?
- What is the community's definition of health?
- What specific health problems can be addressed?

For each health problem, the following questions may be asked:

- What is/are the source/s or causes?
- Are there remedies, existing solutions within the culture?
- If so, what are they?
- Are there possible preventive measures?
- Are these measures culturally acceptable?
- What resources (people, facilities, etc.) already exist to help address this problem?

For module development:

- What resources are available (people, audio-visuals, pamphlets)?
- In which languages?
- Are there potential writers from the language group?
- Is special training needed?
- Is it necessary to train anyone for specific tasks (e.g. village pharmacy, water testing, pump repair, lab work)?

For module content:

- What objective, content presentation is needed for learner reading materials?
- What objectives for learner writer activities (newspapers, articles, booklets, flyers, notices, posters)?
- What audio-visuals are available for the module?
- Are there demonstration activities to complement the modules?
- What support is available from community technical services (sanitation, family planning, clinic nurse, water supply, etc.)?
- Are visits possible to local facilities (clinic, hospital, other villages)?

The following outlines the Kabiye version of a health program integrated with literacy classes:

1. Health Facilities

1.1 Class Activities

- Nurses, doctors visit classes
- Class visits clinics, hospital, labs
- Demonstration of microscope, stethoscope
- Specific demonstrations, e.g. nutrition
- Appropriate audio-visuals
- Relevant reading materials

1.2 Literature Production

- Booklets on experiences with sickness
- Booklets on hospital experiences
- Pamphlets on treatment of various diseases
- "When To Go To The Hospital"

1.3 People Resources

- Kabiye speaking health personnel
- Village Health Workers

2. Education (Primary and Secondary)

2.1 Class Activities

- Special child programs with parents attending as observers

- Parents reading health books to children & vice-versa
- Joint demos by mothers and children (e.g. washing hands)
- Nutrition demonstrations
- Appropriate audio-visuals

2.2 Literature Production

- Booklets for children
- Newsletters
- Notices
- Stories of sick/well babies told by siblings

2.3 People Resources

- School teachers
- Nutritionists

3. Public Health Department (Water/Sanitation Div.)

3.1 Class Activities

- Lectures on safe drinking water, latrines
- Visits to good water systems, latrine systems
- Chart of fecal-borne disease in relation to latrines
- Appropriate audio-visuals

3.2 Literature Production

- Traditional disposal systems
- Latrines
- Safe drinking water
- Specific water-borne infections
- Water filtration
- Small latrines for children

3.3 People Resources

- Doctors
- Public Health Department
- Well diggers
- Village Health Workers

4. Agriculture

4.1 Class Activities

- Projects suggested by farmers
- Presentations on crop rotation, cattle raising

- Rabbit raising
- Appropriate audio-visuals

4.2 Literature Production

- Books by local writers based on advice of resources
- Local experts
- Older people within community

4.3 People Resources

- Peace Corps
- Agricultural extentionists
- Successful local farmers

5. Government, Political Groups

5.1 Class activities

- Slogans/songs re health, women's groups
- Gov't. officials' visits to observe progress, encourage

5.2 Literature production

- Books on political structure of Togo
- Books by women leaders in pol. groups: hygiene, social and economic problems
- History of community as told by the elders

5.3 People Resources

- Government officials
- Local dignitaries
- Village chief
- Older men and women

6. Religious Groups

6.1 Class Activities

- Classes in churches
- Reading Scriptures for spiritual strength
- Health, nutrition demonstrations
- Discussions on causes of diseases

6.2 Literature Production

- Scriptures
- Books to explain causes of diseases

6.3 People Resources

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- Kabiye translation team
- Church pastors
- Lay leaders
- Village Health Workers
- Nutritionists
- Peace Corps
- Medical personnel

7. Personal Resources

7.1 Class Activities

- Letter writing
- Filling in postal, bank forms
- Note taking
- Practical uses of math
- Use and significance of baby scales

7.2 Literature Production

- Simple booklet on filling in required French forms
- Sample forms with translation into Kabiye
- Math exercises
- Personal experiences

7.3 People Resources

- Gov't. literacy officials
- School teachers
- Postal worker
- Agricultural extentionist (on weighing grain)
- Nurses/VHW

8. Traditional Medicine

8.1 Class Activities

- Herbal demonstrations
- Discussions with traditional midwives, healers

8.2 Literature Production

- Booklets on herbal uses
- Booklets on childbirth
- Booklets on nutrition

8.3 People Resources

- Noted herbal doctor in Lome as speaker
- Local midwives
- Local healers

6. CONCLUSION

Village women can achieve literacy and at the same time contribute significantly to community health improvement.

Some women have already had minimal schooling and are semi-literate in French. With weekly classes they achieve literacy in Kabiye within about three months.

Women with no primary school background often become literate in six months. Some from both groups go on to become workshop participants after a period during which they gain reading experience in Kabiye.

Some women become teachers for other literacy classes. They are capable of assisting health or village workers in such tasks as measurement, weighing children, charting village illnesses, and observing and participating in preventive health measures.

Native trained writers are a key factor in promoting long term efforts. Readers learn by reading. Reading stimulates new ideas, new concepts which have a good chance of implementation. If writers have been trained, and if a receptive atmosphere has been established, these new ideas when put into writing are then capable of being shared on a wider basis than formerly. Thus the cycle continues. It is hoped that improved health on a wider scale will also ensue.

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APPENDIX

Community Definition of Well-Being

Peace within the family, and the family with its neighbours, to the extent that the family is respected in the community.

Two to six children, with at least two years between each birth.

Both parents living and free from serious chronic disease or disability, living together, and capable of caring for their dependent children.

Education to primary level for all children, with the possibility for continuing with secondary school for some.

Resourcefulness in domestic finances, and in educational and health care development.

Cultivation of most of the land available to the family, and at least four *douzen* for each family member (1 *douzen* = 25m. x 50m).

Two or more cooked meals a day, each of which should consist of at least one staple food and one or more other foods.

An adequate standard of hygiene in and around the home; a deep pit latrine with cover; control of vegetation in the compound; an outside kitchen; maintenance of the house.

Easy access to water, i.e. within 200m. of the home.

Access to acceptable health care.

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LESSONS LEARNED FROM THE KRESH LITERACY PROJECT

Rick Brown

Rick and Lenore Brown joined SIL in 1973 and arrived in Sudan in 1977, where they undertook the Kresh language project. Rick also contributed to the development of some language-learning and literacy materials in Arabic, and has served in some consultant capacities. In 1991 they moved to the Eurasia Area, where Rick is a language program coordinator.

1. INTRODUCTION

The Kresh language is a cluster of dialects spoken in southwestern Sudan, rather distantly related to other Central Sudanic languages. Like many regions in southern Sudan, the area is little developed and much troubled. My wife Lenore and I began research into the Kresh language when we moved to Raga in April 1978, and a tentative orthography was accepted later that year. The then Southern Ministry of Education appointed a Kresh language officer and two language inspectors, mostly choosing men who desired this position and whom we had recommended.

In 1980, we and the three Kresh men moved to the Literacy Centre at the Institute of Regional Languages in Maridi, where we spent 15 months developing the initial Kresh literacy materials. These consisted of a pre-primer, four primers, and a post-primer, following the Gudschinsky method fairly closely. The next year, following the Ministry's request for a more familiar approach, the pre-primer was replaced by an alphabet book. This was supplemented by an alphabet story book, which had a story for each letter of the alphabet. The primers were revised somewhat in 1983 and again in 1985, in part to make certain lessons more explicitly tone lessons.

In April 1990, we moved to Khartoum in northern Sudan, where we discovered an interest (felt need) among the two thousand Kresh adults for a literacy program. It soon became evident that the present literacy materials were not as effective as we had hoped.

In 1987 I had trained a couple teachers in Khartoum and supplied them with books and tapes, but when we returned in 1990, it was evident that the materials were not as teacher-independent as one would wish, and that some things were not being learned. Similar reports were coming from Raga. As a result, a vigorous program of experimentation was initiated, the results of which are described in what follows.

2. GOALS

Our goal was to develop a literacy program, and particularly literacy materials, that would be practical and effective in teaching rather disparate audiences how to read Kresh fluently. These included both minor and adult nonliterates, semi-literates, readers of Arabic, and readers of English, in both formal and nonformal settings. Because of the social and educational conditions in the troubled south and among those displaced to the north, it was desirable that the methods and materials be as fail-safe as possible, and suitable for an each-one-teach-one approach as well. This necessitated the following:

- conforming with local learning styles
- accommodating familiar teaching styles
- simplifying the lessons and drills
- incorporating into the students' books any essential material from the teacher's editions
- developing a lesson plan and teaching method that would be effective without extensive teacher training and supervision.

It was not planned that the books be entirely self-teaching, except perhaps for those who already read English. However, it was an objective that the materials require only minimal dependence on a teacher or tutor, and that an accompanying cassette tape could provide adequate modeling in the absence of a suitable tutor.

3. PRIMER CONSTRUCTION

3.1. Elimination of the Teacher's Editions

Teachers' editions were eliminated for several reasons. One is the obvious requirement that in an "each-one-teach-one" approach, every student is a teacher trainee, and every student textbook is a potential teacher's book.

In addition, our previous experience with the use of a teacher's edition in Raga had been discouraging. The teacher's lesson plans were inserted in the book in the middle of each lesson, so that appropriate pages faced each other. This imposed rather restrictive limits on the written size of each lesson. Teachers also found it unfamiliar and had trouble going between the lesson plan and the textbook. Each lesson ended with a story on the odd-numbered page (right side). But the teacher's instructions for its use were on the facing page (left side). Therefore, even an experienced teacher tended to go through the plan on the left and then the story on the right.

This meant he asked the reading comprehension questions before the students had read the story!

Another problem posed by the teacher's edition is that it constituted the larger, more prestigious edition of the book. Therefore, if a Kresh elder or official wanted to possess a copy of the book, he wanted the teacher's edition, not a pupil's edition, with the result that there were few teacher's editions left for the teachers.

Because of the teachers' previous experience in teaching initial reading in the poorly-known national language, the teachers felt compelled to discuss the meaning of everything, and to teach it by traditional rote. Thus in listen-to-the-sound drills, the teachers discussed the meanings of the words, which wasted time and defeated the drill's objectives.

Some drills required a blackboard, and these are frequently unavailable even in the formal classrooms. Furthermore, they are not practical for nonformal classes, tutoring in homes, or self instruction with a cassette tape.

In general, anything written on the blackboard is modeled by the teacher, which is the traditional and almost only teaching method. The lesson plan included new built words for writing on the blackboard for the students to read, so they could sharpen their word attack skills without help from context. As you might imagine, the teacher read the words, so there could be no real attack practiced by the students. Review was also done on the board, with similar results. Teachers might even write "listen-to-the-sound" words on the board and teach them, even though some contained unknown letters.

In general, all this writing on the blackboard consumed much time, with the result that the students had little opportunity to read. Therefore, it seemed best to put anything the students needed to read into their books, and to drop the listen-to-the-sound drills.

In the new books, the teacher does not need to write anything on the board, except to show the students how to write a new letter. He is encouraged to write the new and preceding sight words on the board for practice, but this is not necessary. Non-contextual word attack is reduced, but it is written in the students' books, as are the questions and the writing practice. Review is accomplished by reading the drills in the previous lesson.

Since the teacher's edition has been eliminated, instructions for the teacher are included in the back of each volume. Obviously this is needed for the each-one-teach-one approach as well. The instructions explain the purpose of each part of the lesson and how to teach it. There is also a page on reasons to learn to read Kresh, and a page on the new, base-ten

numbering system. The letters taught are listed, together with their name, their keyword, and the keyword picture.

3.2. The Pre-primer Lessons

3.2.1. The Original Pre-primer Book

The original pre-primer had a variety of excellent drills, but they seemed strange to the teachers and ran somewhat counter to the global, relational cognitive style of most teachers and students. Basically the drills were too abstract and meaningless. For example, there was practice making strokes of various shapes, which did not even look like letters, much less anything familiar. Same-different drills concentrated on shape rather than meaning, as did listen-to-the-sound. Almost everything was devoid of meaning, and even illustrated words had no meaningful context.

The end of the pre-primer included well-illustrated sight-word lessons in which a story is built up in succeeding lessons. Later we removed some of the unneeded functors from this story, but otherwise it has served well and has been inherited by every subsequent series. In fact, the pre-primer story has proved to be the cornerstone of our literacy materials, the one thing besides the post-primer reading materials that has not significantly changed.

3.2.2. The Second Pre-Primer: an Alphabet Book

The pre-primer was replaced by an alphabet book, produced at a course in Maridi, with the pre-primer story at the end of it. In the alphabet book, each page displayed a letter of the Kresh alphabet in large print together with three printed, illustrated words in which that letter occurred. Vowel letters and tone diacritics were taught separately. (I must have thought all my students were little linguists.)

The lesson plan for the alphabet lessons called for the teacher to show and name the new letter, show the illustration, say the word, ask the students to listen to the new sound in the spoken word, then find and point to the new letter in the written word. This approach might be a bit too analytical for global thinkers who are just beginning school, but there was little chance to find out because the teaching method was so strange to them. The Kresh are accustomed to things being passed down or picked up by experience, but the "listen and become aware, search and discover" approach is novel, certainly too novel for each-one-teach-one. In almost every case, teachers and tutors reverted to teaching the words. They would chant them, discuss them, write them, and expect the students to learn to read them all. Thus the students were expected to memorize 140 unrelated sight words, with no stories, no meaningful contexts, and no repetition in subsequent lessons. Worse yet, almost none of these words were used in the

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primers, so that the pre-primer did not even form a foundation for the primer series. In some schools, teachers would spend the whole (three-month) school year just teaching the alphabet book.

3.2.3. Redesign of the Alphabet Book

If used correctly and briefly, the alphabet book could have been helpful, but given the common misconception that one can learn to read from it, and the time teachers wasted trying to make this happen, it seemed best to change it.

The first problem we addressed was the abstraction of tones from vowels. There are five tone diacritics and five vowel letters, so we presented the alphabet as including twenty-five distinct vowels. In fact, most of the original primer lessons followed this approach, but the later lessons had abstracted tone somewhat, having tone-based drills and teaching two or three vowels at once with that tone. The teachers were never thrilled with this approach, and it turned out to be less than effective with the students. But although the approach in the primer was a bit too analytical, that in the alphabet book was nearly impossible. After all, one cannot say a vowel without a pitch, and one does not normally say pitches without vowels.

Then we put the twenty-five vowels up front in the alphabet book, where they got more attention, and where some people wanted them to be. Experience in several languages of Sudan has shown that vowels need extra attention. It may be that this stems from the lack of consistent vowel sound-symbol relationships in English and Arabic.

The more significant change was to drop the idea of including three illustrated examples of words with each letter, and to choose a single keyword that began with this letter. There was strong demand for this, and doing so pleased the students greatly. I did not include the written word with the picture, although I put the names of letters and keywords in the back of the book in case the teacher was not sure of them. This was to keep the student or teacher from trying to learn or teach the written word. Instead, the focus was on the name of the letter. The Kresh can learn to name shapes, and so the sound becomes associated with the name of the shape as well as with a picturable keyword that begins with that letter and sound. In this sense we were following the traditional alphabet approach, but it should be remembered that studies have shown that approach to be effective, as long as the names of the letters reflected their sounds.

At a student's suggestion, we developed alphabet drills like matrical charts. The letters were reviewed and drilled in these matrical charts, with an increasing number of letters as the lessons went on. Vowels and consonants were not mixed. Initially the charts included the keyword

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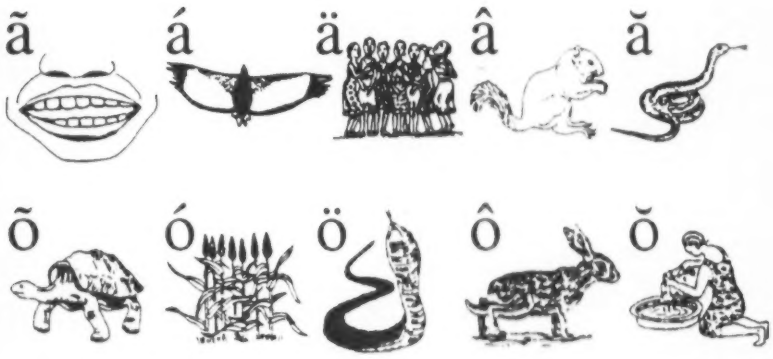
picture, which helped students considerably. They did not have to say the keyword, just the name of the letter, but the keyword picture helped them to remember the letter. Below is a sample vowel matrix:



After certain letters had been drilled a bit, they began to appear without their keyword picture. Not surprisingly, this seemed to be necessary to keep people from associating the name with the picture rather than with the letter. These drills were well accepted and worked fairly well, although people found them boring and somewhat meaningless.

For certain of the letters it was hard to find a nominal keyword that began with that letter. Nevertheless, people greatly preferred a verb or even ideophone that began with that letter, rather than an easily picturable noun that exhibited the letter medially. For one fairly common vowel ("**a**" with mid tone), no one could find a thing that began with it, so I had used a noun **bără** 'porcupine'. But in subsequent drill charts, some students would say "**bă**" instead of "**ă**"; for example, they would read a name-the-letter-drill as "**ă, bă, á, â**"! So eventually we used a plural verb "they dance" for the keyword, illustrated by a picture of women dancing, and this worked fine! (This just goes to show, there is no substitute for testing; almost nothing has worked the way my Western and analytical mind had thought it would.)

This new alphabet book proved to be more effective and less time-consuming than the old one, but it was boring. People lost interest and their attentiveness weakened. To spice things up I let them read some of the pre-primer story, and I found their interest increased greatly.

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Frankly, I was surprised at how well the Kresh learn sight words. (I grew up on a nice analytical diet of phonics.) I came to realize that words can be easier to learn and distinguish than letters. I also realized that abstractions like mere shapes (for which the Kresh have no names, only comparisons) seem devoid of meaning and value to them, and so they learn letters more slowly than whole words.

3.2.4. Absorption of the Pre-Primer Lessons into the Primers

Since motivation is such a factor in anyone's learning to read, the Kresh series eventually moved to a point of beginning with the pre-primer story. The alphabetic name-the-letter (and-note-the-keyword) drills are now interspersed throughout the primer series. These drills come near the end of the lesson and usually have four, sometimes eight, similar but contrasting letters. Vowels and consonants are not mixed. In vowel matrices, identical tones are aligned on the same row (or column) and identical vowel qualities are aligned on the same column (or row). As a result of these developments, there is no pre-primer book at all. In place of the "alphabet book" there are the alphabet drills, and at the end of the primer there are illustrated charts of all the taught letters.

The "pre-primer" story is now developed in the first seven lessons of the primer series. The lesson format is as follows: one to three pictures and sight words. Verbs are presented in an illustrated three-word sentence. The sight-word verb is bold in the sentence and is repeated alone under it. After the first lesson, the new words are followed by a sight-word drill in which the new words are mixed with sight words from previous lessons. Traditionally this has been done on the blackboard, but even so, it has proved useful to give examples in the book of what to do. This is followed by the story. After the story there is writing practice, making circles between ruled lines or strokes between lines.

As is traditional in Gudschinsky primers, the last pre-primer lesson consists of a new story made by re-arranging the words in the previous story. The Kresh are pleased, by this the seventh lesson, to be able to read a story they have not memorized. Two new elements in our final lesson, however, are that it also teaches a new word, the question word for 'what' (using an analysis drill), and the story is followed by questions that use 'what'. The students learn 'what' with no difficulty and read the questions fine. The question word is needed for the subsequent primer lessons, all of which have comprehension questions that the students read for themselves.

3.2.5. The Teaching of Numerals

In teaching our own children to read, my wife Lenore and I had started with the numerals, mostly to teach the symbol-word relationship. Numerals

are graphically simpler than words, yet more meaningful than letters, and the kids caught on quickly.

I wanted to try the same thing in the Kresh books, and in any case, as many have noted, if the primer is going to have lesson numbers and page numbers, then it had better begin by teaching the numerals. Unfortunately, it took eleven years for people to agree on what the number system was. They agreed on writing in the universally accepted base-ten system with Arabic numerals, but disagreed on what to call the numbers. Some elders wanted to express the numbers orally in accordance with the old system of counting by ones, fives, tens, and twenties, instead of by powers of ten. Thus '76' would be expressed as something like "three twenties and ten with five added to it and increased by one". But this system was a mismatch to what was being written (which meant seven tens and six units), and it only went to 100 (five twenties). Now that commerce with money was common, people needed higher figures, and ones easier to add. The alternatives were to use the Arabic counting system, or to borrow enough Arabic words to develop a base-ten counting system in Kresh.

People failed to agree, and the issue was skirted for years by writing numbers with numerals rather than words. But when we began to make recordings of various materials, there was a need to express these numbers in some way. Eventually people decided to borrow the well-known and already used Arabic names for 6 - 9, 100, and 1000, and to employ them in a new base-ten Kresh system. So now '76' is expressed something like "seven tens increased-by six", and hundreds and thousands are no problem.

The new system is listed out in the back of the primers as a reference for the teachers and students. The teachers, most of whom are under 40, like the system and teach it to the students. The inside front cover of volume one has a display the teachers can use to introduce the students to the base-ten system; it is reproduced on page 28.

3.3. The Primer Lessons

The foregoing described how the original pre-primer, with its rich but confusing variety of lesson types, was reduced to a series of alphabet lessons, and how these were then reduced to a type of supplementary drill in the primer lessons, so that only the pre-primer sight-word lessons remained as a distinct type.

The original primer series also had a variety of lesson types, and this proved to be confusing and discouraging to teachers. It also inhibited the each-one-teach-one approach. For example, there were:

- *vowel-letter* lessons, in which the analysis drill presented the letter by isolating it and the synthesis drill built by adding to it

• *consonant-letter* lessons, in which the analysis drill presented the letter by eliminating it and the synthesis drill built by adding it to another letter

• *tone-diacritic* lessons, in which the analysis drill presented the diacritic by contrasting it, and in which the synthesis drill built by changing another tone into it

• *underdifferentiation* lessons, which began with three sight words and had unique drills

• *review* lessons, which had two contrast drills and a list of words

• *functor* lessons, which in our case differed from letter lessons in that they lacked an identification drill or illustration. Actually, functor lessons had three types like the letter lessons, those that *isolated* the functor, those that *eliminated* it, and those that *contrasted* it.

The number of drill boxes differed among these types, and the use of box numbers differed as well, which complicated learning to teach them. For example, a contrast drill was numbered 4 in a letter lesson, 3 in a functor lesson, and both 1 and 2 in a review lesson.

For us, the most successful drill was the functor drill, especially for the isolated function words. I am always amazed at how well these work. In writing the original series, we had needed many more functors than the two or three we were allowed in every six lessons, and we sometimes sneaked additional function words into the contrast drills. So one of the first revisions we made was to convert most of the review lessons into functor lessons. As for the new words in the previous lesson, these are still reviewed in the best way, by using them in the story. Letters are now reviewed regularly in the alphabet (name-the-letter) drills.

One problem we discovered was that while untaught letters make some function words easy to recognize, single-letter affixes or clitics are more difficult to learn if the letter has not been taught. Also, there is a tendency to associate that letter too strongly with that particular function. For example, when the auxiliary verb was taught, the letter 'ă' was not yet known. Thereafter, when **kă** was taught, it was confused by some with **ă**. The 'k' was actually a prefix, but when a prefix is added to a sight word, it changes its shape, and the result is not recognized. Therefore, **kă** had to be taught separately. But when **kă** was taught, it was followed by the prefix **y** on the following verb stem. This prefix had been taught as a prefix but not as a letter, which did not work very well either. Some, therefore, associated the [y] sound with the preceding **kă**, and added it even when it was not there. When another verb-stem prefix was introduced, to follow **kă** or **ă**, everyone got confused. The letters 'ă' and 'v' are not very productive

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outside of a few functors, and so they had been relegated to a position late in the series. They were moved up, however, and given new lessons, so that they were introduced and practiced before they were used in a functor lesson, and this smoothed the learning curve considerably.

The same thing happened with *i* 'the', which was taught before 'i' was taught. It proved to be a difficult functor. A further problem with the old approach is that we were not able to reinforce the functor by using it in a writing drill, since the students had not yet been taught to read and write that letter. Therefore, for Kresh at least, it would have been better to teach a letter as a letter before teaching it as a single-letter functor.

The underdifferentiation lesson was taught like a regular letter lesson. In one such lesson a unique but similar letter shape was taught: barred 'j' ('ɉ'). The 'j' had been taught earlier, and care had been taken to not confuse the two. Now the barred 'j' was presented using the usual letter drills, but before the word-attack drill it was announced that since many Kresh pronounce it the same as 'j', it would just be written the same way as well, as 'j'. The words that had just been taught with barred 'j' were then shown written with 'j'. In another lesson, that for 'nj', it was only noted that this was the same symbol as for a different sound, but that they were being written the same way, since many speakers pronounced them the same. Both lessons seemed to work all right.

Tone drills were eliminated altogether as too abstract. The vowels with the less-common tones, namely the two glides, had been mostly taught near the end of the series, since vowels with the more common tones were in demand for the stories. These less-common tones were then the main ones that received summary treatment in tone lessons, rather than being taught five times, once for each vowel quality. Being uncommon, they occurred but little in the stories and so got little review. As a result they were not learned well. In addition, there was the problem that the tone drills used a different technique, contrast, rather than isolation or elimination, adding to the general confusion about how to teach the lessons. So a few of the review lessons were converted to vowel lessons, and all tone drills were converted to vowel drills.

In the original series, the consonants had been taught by eliminating them, in the usual Gudschinsky style, while vowels were taught by isolating them. Unfortunately, the two kinds of drill ended up looking the same but working differently. This even confuses our linguists, and it makes our teachers uncertain of themselves. I can imagine it would discourage the each-one-teach-one approach as well, since the Kresh try to avoid losing face too often, and this is something easy to mess up on.

The original rationale for the elimination approach is that consonants cannot be pronounced in isolation. Actually, some can, such as [s] and [z]. As for our teachers, they would always pronounce them anyway, regardless of the drill or theory. For example, they would say something like "**tende**, te, e, te, e; can you hear the sound [t]? This shows us the letter 'taa', which has the sound [t]." The teachers much prefer that all new items be taught by analyzing down to their isolation, not by eliminating them. This approach was adopted and tested for both functors and letters, and it seems to work all right. It certainly leaves everyone more relaxed. It is even used for teaching punctuation in functor lessons. Even if the teacher does not hum the associated intonation pattern, he or she can name the punctuation mark and say what it does.

The pattern of letter lessons was made to follow that of functor lessons, so that now the two differ only in what is taught, and not so much in how it is taught. The identification drill, which was never in the functor lessons, is replaced by the use of emboldening; that is, the new letter or functor is printed in bold print. The teacher draws attention to this, the same black letter(s) with the same sound, in all the cells of drill 2. It would be the very same words lined up in an identification drill, only highlighted by vertical alignment rather than emboldening. I suspect the alignment technique works better with linear minds, since my more global Kresh proofreaders do not seem to notice whether words are aligned correctly or not. Perhaps an identification drill would be helpful, but its vertical shape would consume needed space, and it is more difficult to implement with words than it was with syllables.

This brings us to one of the main problems with the original series: nonsense, especially nonsense syllables. Gudschinsky warned about nonsense, but that is what syllables are in an isolating, disyllabic language like Kresh. Some reports have it that the syllable approach works well with certain peoples who are linear thinkers or who have monosyllabic languages, but the Kresh have little awareness of syllables, and just about zero tolerance for reading nonsense. They try to make sense of everything, and if a book makes no sense, then either they are too stupid to learn, or else the book is too stupid to make sense. Either inference reduces their motivation. Therefore, we have basically abandoned the syllable approach in favor of a word approach. People are quite happy now to figure out new words, whereas they generally got either frustrated or bored attacking nonsense. There is also the danger that syllable drills could teach them merely to sound out texts rather than read them for meaning, although I have not seen that happen. Perhaps they are too global for that kind of nonsense.

The demand for meaning affected the built words as well. Adjectives, such as 'red', and relational nouns, such as 'top-of', are not quickly recognized in isolation, but they only need a dummy head to be acceptable. Verbs, to be recognized and accepted, only need a verb-focus clitic. Function words are not recognized or accepted in isolation. It was futile to try to build them or contrast them, even if they had already been taught. All the sentences in functor lessons needed to be sensible; for example, pronouns needed antecedents. Furthermore, the sentences needed to be compatible with the preceding context, even in the drills. For example, if the second cell of a functor build-up said that the buffalo died, then the next cell could not say he ran away. This applied within the cell as well. For example, everyone was disturbed by a build-up functor drill for the word for 'not', which said something like 'John went to the farm', to which 'not' was then added to make 'John went to the farm not' The words corresponding to 'John' in the second line had to be changed, so that we had something like the following.

John went to the farm.
Peter went to the farm **not**.

Such arrangements run counter to my tidy, linear thinking, but they do make more sense.

3.4. The Drill Page

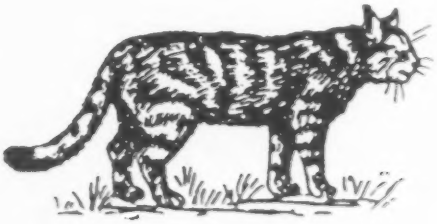
Letter lessons have an illustrated sight word, while functor lessons have no illustration. Some of the functor lessons could have been illustrated, and this would no doubt have pleased the students, who loved the illustrations immensely. The illustration is used to help teach the sight word, and in standard Gudschinsky manner, the sight word is drilled on the blackboard or on flashcards mixed up with previous sight words.

With the elimination of the identification drill, we were left with four drills on the page and one still in the teacher's manual. This latter included the words to write on the board for the students to attack. Some of these are words they would encounter in the accompanying story. These were put on the drill page in drill 4, the word build-up drill. We avoided including words for attack that would not be needed soon afterwards, as this ran counter to our literacy goal, that the students acquire fluency in reading. There were, however, a few funny or interesting words which were kept because people enjoy figuring them out. The first three drills worked much the same in both letter and functor lessons: analysis of the new letter or functor in box 1, synthesis to build new words or sentences in box 2, and

contrast in box 3 to reinforce differentiation between the new element and previously taught elements.

3.4.1. The Analysis Drill

Drill 1 guides the class in analysis, from an isolable word to the new letter, or from a whole sentence to the new functor, or even to the new punctuation mark. The letter analysis proceeds through the traditional Gudschinsky intermediary syllable stage. This might help to increase awareness of syllables, but I am not certain it increases awareness of the letter, especially if it begins the word anyway. As was mentioned earlier, the analysis always proceeds to the isolation of the new letter or functor, which is in boldface type, regardless of whether that letter or functor is easy to pronounce in isolation. The practical need for consistency of approach overruled the traditional concern for ease of pronunciation. Below is an example from lesson 52:



léjé

léjé
lé
l

The functor analysis drill proceeds from whole sentence to phrase to functor, even if the functor is but a consonant prefix or punctuation mark. Whereas letters to be taught were usually displayed next to the lesson number, this was avoided for most functors, because they were not recognizable to the students out of context. For example, the teacher would inevitably say something like "Now we are going to study the word dee." Then when the students failed to recognize the word, they were embarrassed, and the teacher felt obliged to try to explain it, wasting precious time. Drill 1 explains it quite adequately. Functor analysis drills are shown below from lessons 132 and 134, respectively:

«Nõwõ nî õwõ Gãkã nẽ »	«Ôwõ eté nẽ?!»
	Ôwõ eté nẽ?!
	?!

Dëë kă ndīgí ãpá ká éné í kã nëë, õjõ ẽré ũtú. **dëë**

Note that functor drill 1 is just like those drills in the pre-primer that isolated a verb from a short sentence. As a result, we are left with only four kinds of drill on the drill pages of the entire series: analysis by isolation, synthesis (for functors), contrast, and word-attack, and they all use sensible, isolable, words or phrases.

3.4.2. The Synthesis Drill

To make the synthesis drill (box 2) more sensible in letter lessons, the synthesis proceeded to words rather than stopping at syllables. It bothered me, however, that while we were working hard in drill 4 to teach a consistent left-to-right attack, drill 2 started with a single letter at the middle or even the end, and then built the new word. Was this teaching them to go backwards? With time I found it confused some students. For example, there would be a drill like this to build up with 'r':

ö	ö
rö	rö
röwö	börö

In cell 2, some students would actually say "ö, ör", and then have to be corrected. So we changed drill 2 (synthesis) to be like drill 4 (word build-up) exactly, as shown below, and this has worked fine.

rö	bö
wö	rö
röwö	börö

Thus drill 2 has become a word-attack drill for words with the new letter, and drill 4, if needed, is for new words without the new letter. Often drill 4 is not needed, as all the new words in the story have the new letter and are introduced in drill 2. Drill 4 is most often needed in the functor lessons.

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Functor lessons proceed in the same traditional pattern, which in our case was quite successful. The drill below is from lesson 134:

Kă ndīgí yõ kã nëë, ẽré ũtú.
Dëë kă ndīgí yõ kã nëë, ẽré ũtú.
Kă ndõkõ ëté ã nëë, rãyã gbírí.
Dëë kă ndõkõ ëté ã nëë, rãyã gbírí.

3.4.3. The Contrast Drill

Drill 3 is the contrast drill for functors or letters. In letter lessons, the contrast is between whole words, not just syllables. The word with the new letter has just been built, and it is contrasted with a word they have read before which is similar but has a contrasting letter. If possible we use minimal pairs, but since the students' reading vocabulary is still limited, that is often not possible. Below is the contrast drill from lesson 98:

ôzó	**kôkó**	**mônó**	**kôwó**	**góḷô**
ózó	**kõkõ**	**mónõ**	**kõwó**	**kõḷó**

In the case of functors, we sometimes violate the principle of contextual compatibility by juxtaposing sentences that would not normally be uttered together (because the statements are contrary), but students are told that drill 3 is supposed to show how words differ; they learn this quickly from the contrast drills (box 3) in the letter lessons, so they accept it in the functor lessons as well. In the case of words, the minimal pairs impress them with the importance of looking at the words carefully, particularly noting the tone marks. In the case of functors, it increases their awareness of grammar. I have not experimented with leaving the contrast drills out, but they seem to be helpful. For those who have already studied in another language, the contrast functor drills bring the joy of discovering the systematic grammar of their own language. Below is a popular example from lesson 132, which contrasts punctuation (and hence distinctive clause-final features of intonation):

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Ánjä mömõ?!
Ánjä mömõ!
Ánjä mömõ?
Ánjä mömõ:
Ánjä mömõ.

3.4.4. The Word Build-up Drill

Drill 4, the word build-up drill, was put in both letter and functor lessons, if there were new words to introduce for the story. Many in southern Sudan memorize words quickly but have difficulty attacking new words, so the drill is needed. However, the Kresh students had difficulty with this drill. Why should they read just the first syllable of a word, then the first syllable together with the next, until finally they made sense of it? I would have preferred to just write the whole word and let them attack it, but they needed the practice attacking from left to right. Many, I discovered, look at the words from their right side, perhaps as an influence from Arabic, but some just did not know how to look at a Kresh word, even if they did not read Arabic. Therefore, it seemed good to build up the words by syllables, beginning at the left. But as I explained word attack to them, I found myself telling them to look at the half of the (disyllabic) word on the left, then the half on the right, then say the halves together. Eventually I wrote it that way on paper, and discovered they understood much better. Then I experimented with making drill 4 that way, with the left syllable, then on the next line the right syllable, then the whole word, together with any needed clitics or possessors. This worked much better, and the Kresh students were much happier with it. It is illustrated below from lesson 56:

bē	lō	rē	ō
bé	wó	mbē	lō
bēbé nî	lōwó	rēmbē nē	ōlō

3.5. The Stories

Much has already been said about the stories. Gudschinsky said you learn to read by reading, and we have emphasized the story as the core of the lesson. There are 137 lessons, and the stories average around 250 words each, ranging from 24 words in the pre-primer story to 500 in the final stories. They have titles and are followed by comprehension questions. The

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Kresh are quite happy to read each story several times, which is what they do in class.

As usual, only a few new words are introduced in each lesson, and they are generally reused in the following five stories and occasionally thereafter. It is very difficult, of course, to have natural-sounding stories with such severe limitations on the use of new words. Our writers, however, were creative, and the stories are cultural and interesting, despite the constraints.

Nevertheless, the stories have been reviewed, tested, and rewritten several times, to remove awkward or difficult constructions, unnatural phrases, poor discourse flow, weak story construction, and even mistakes. Most of the difficulties are discovered as I listen to students read. So one lesson I have learned is the need to test everything, repeatedly.

Another lesson is not to be too rigid with the constraints. In some contexts the students would consistently "guess" the "wrong" word rather than the known but less natural one that was written. The less natural one had been used for the sake of repetitive reinforcement, whereas the natural one had not yet been introduced, to keep the count of new words low. I found it was often more conducive to their reading fluency to go ahead and incorporate the new word they expected in a given context, if they knew the letters, even though the word was not going to get repeated in subsequent lessons.

Another lesson is that there is value in repeating groups of lessons. For example, let them read lesson 45 a few times, then 46 a few times, then 47 a few times. Next time they can start at 46 or 47. One reason is that many students frequently miss classes for a variety of reasons, both in formal settings and nonformal. Another reason is that the Kresh memorize so well that they have the drills memorized after a few times, and begin to recite rather than read. The story is longer, but the gist of it gets memorized as well. That helps the slower readers, but sometimes they put their energy into memorizing it rather than learning to read it. This is a common practice for those who are going to "read" aloud in public in any language, but it inhibits learning to read well. So rather than reading one story 8 times in one class, and the next story 8 times in the next class, we might read the two stories 4 times each in the same class, and in the next class time read the same two stories 4 times again. (Actually, a Kresh class in school is two 45 minute periods; a nonformal adult class is 3 hours and covers more than two lessons.)

3.6. The Comprehension Questions

The comprehension questions were moved from the lesson plans in the former teachers' edition into the primers themselves. The questions had to

be worded to use vocabulary that was available, and the question words had to be introduced early in the series, so that the students could read them. A student volunteer reads the four questions aloud, and the class answers each one. They love it!

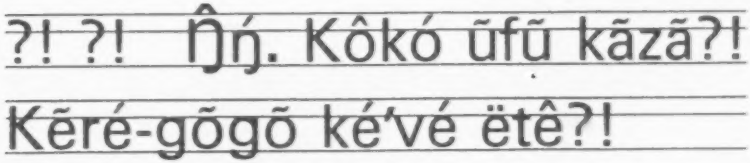
Reading the questions gives the students practice reading question words and the yes-no question mark and associated intonation. It also gives them further practice reading some of the new words that are introduced in the story.

Whereas the story is read several times in class, the questions to it are read only once, usually after the first reading. We did not experiment with having the questions read each time, and no one seemed to expect that they should be.

3.7. Writing Practice

One thing that became evident is that writing helps the students learn the word shapes, improving their reading. But writing rarely occurred if there was no writing lesson included in the book. It was not sufficient to say that the students should copy the word-attack words and the first few sentences of the story (which in any case included some untaught letters). There needed to be a writing model in the book for them to imitate, then they would copy it several times.

So the writing practice drill was developed. This drill is not in a box and is not numbered, and it follows the comprehension questions. It consists of wide-ruled lines and large, sans serif characters to imitate in writing. For letter lessons, the student will write the new letter repeatedly, but the emphasis is on writing sentences. Difficult functors and grammatical forms, such as plural verbs, are especially featured to draw more attention to their shapes. In a functor lesson, the new functor is not featured in the writing drill if its letters have not all been taught. Below is a writing drill from lesson 132, which provides writing practice for the punctuation mark `?!`:



In the original primer series, the teacher's manual would include a capital letter to be taught and some words with which to drill it on the blackboard. Generally, the capital letter for a phoneme was taught in a later lesson than the lowercase version. We dispensed with the teacher's manual,

grammatical patterns in their language. For that reason I am calling them "grammar-awareness" drills.

Later, the revised name-the-letter drills were moved from the now defunct alphabet book into the primers. These drills were also placed at near the end of the lessons and served to review the letters in a somewhat contrastive way.

3.8.1. The Name-the-Letter Drill

Like other drills, the name-the-letter drills were boxed and given a drill number, in this case 5. Below is an example from lesson 34:

In the first volume (87 lessons) of the current primer series, the only supplementary drill is box 5, which houses the name-the-letter drills described above. In some cases there are two or three rows of these, according to the space available on the page at the end of the lesson. In some cases there are only letters, without illustrations, to wean the students away from dependence on the illustrations. This is shown below from lesson 119:

ẽ	ĕ	é	ê
ĩ	ĭ	í	î

A few of the box 5 drills include a phonics-type induction drill, similar in form to an identification letter drill. In this drill words they have been reading for a while are lined up in four boxed columns, with the common letter emboldened and vertically aligned. Under each column there is usually a large image of the character and perhaps a keyword picture. The students are encouraged to note that one part of these familiar words has the same sound and the same written representation. An analytical mind would think this should be obvious, but the Kresh are inductive thinkers; they note the pattern or principle after having seen it frequently. Also, they memorize

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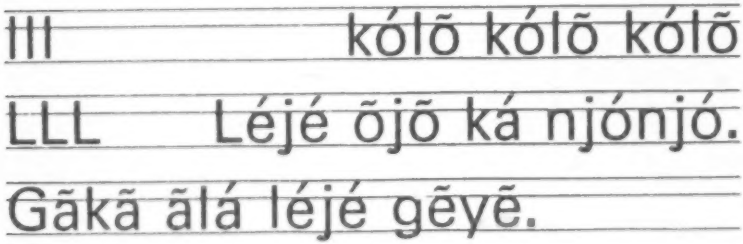
and put the capital at the top of the lesson, alongside the lowercase version, and also in the writing practice, both in the lesson in which it was introduced, and in some subsequent lessons. In general, we drilled those words which would appear in stories with capitals, sometimes using a phrase or sentence from the story. As it happens, though, some Kresh letters rarely occur sentence-initially or in names, so they do not get much practice. Perhaps they do not warrant it either. Below is the writing drill from lesson 52, which includes both lowercase and uppercase forms of the letter.



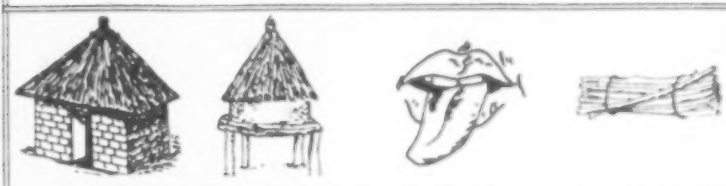
In later lessons, students are instructed to copy a paragraph or two from the story, and eventually to compose stories. Looking back, however, I can say that the writing practice was inadequate, and there needs to be more copying or dictation, and in particular more composition. What I found was that many Kresh adult students who knew how to read English needed drills to learn to write the Kresh tones. My goal, understandably, was for them to learn to read, but a secondary goal was for them to become teachers, at least on an each-one-teach-one basis. Many have done that, but it would have been better had they first learned to be consistent at spelling.

3.8. Supplementary Drills

During the production of the original primer series, supplementary drills had been considered and designed but not implemented. These were mostly functor contrast drills, whose purpose was to review functors and punctuation that had been previously taught, and to introduce new but simple functors which were similar to ones already taught. These were included in later trial editions of the new series in the later lessons. Since they did not usually pertain to the topic of the lesson, they were placed at the very end of it, after the writing practice. These drills proved to be helpful and popular. In fact, it has been possible to include almost all of the morphological features of Kresh into these drills. They have been especially interesting to educated Kresh, as the drills help them recognize various

word shapes faster than they learn the sound-symbol relationships, so this needs review. The example below is from lesson 49:

rómō	ābā	ónjō	rāshá nē
tāmā	kōbó	njónjó	rēshé nē
rēmé nē	ḷēbé	ēnjé nē	rī'dī nē
máŋgá	sóbō	ānjā nē	rōgō nē
m	b	nj	r



One drawback to the phonics drill is that it introduces a new drill type, similar to the old identification drill, although inductive in approach. On the other hand, some of the grammar-awareness drills sometimes utilize this approach as well, quite successfully. Another drawback is that it requires that the student have learned several isolable words with the letter(s) being drilled. This made it difficult to introduce the drill in the earlier lessons, and by the later lessons it was not clearly needed.

Another drawback was that the Kresh teachers find the drill awkward to teach. Since the identification drill works fine with function words and intonation in the grammar-awareness boxes, I assume the problem with the phonics drill is that the students and teacher are listening to the meaning rather than the sound, and fail to notice the common phoneme/letter.

3.8.2. The Grammar Awareness Drill

The grammar awareness drills are at the end of lessons in box 6, just after the name-the-letter drill in box 5. They commence with lesson 88, and are fitted in according to the space available. By lesson 104 they are included in every lesson.

In structure, the grammar-awareness drill is either a functor contrast drill or a functor identification drill. It gives review, in an inductive fashion, to difficult grammatical features such as punctuation. It contrasts different person-number inflections on the verb. It also practices

grammatical patterns that are difficult, such as tone changes at pause. In some cases it introduces new functors that would not deserve whole lessons. For example, there are about 60 demonstratives. A few are taught as functor lessons, but others are presented as contrasting demonstratives in drill 6 boxes. The drill below from lesson 88 reinforces awareness of the plural/singular contrast on verbs, a topic that had proved to be troublesome to the students:

Ĩgí mömö yõ ká njónjó.
Rĩgí mömö yõ ká njónjó.

Kãzã nî ũlũ ẽshẽ áyã nî.
Kãzã nî lũlũ ẽshẽ áyã nî.

Õjõ rẽkẽ dã'bã kãzã nî.
Õjó rẽkẽ dã'bã kãzã nî.

It remains important to maintain a meaningful context as much as possible, so the longer drills have been made to tell stories, as far as possible. Below, translated into English, is an example from lesson 124; it uses an inductive approach to reinforce awareness of yes-no intonation and punctuation, these being the only markers of such questions:

Have you been home?	You ate sweet potatoes?
You didn't find anything?	Did you hoe sorghum?
Did you go to the fields?	You harvested maize?
Were you working there?	Did you bring any back?
You saw a wild animal?	Are you going again?
Did you eat anything?	May I go with you?

3.8.3. Experiments with Context Clue Drills

The second edition of our first primer series included "context clue" (cloze) drills, in which the student chose the word that sensibly filled in the blank. This was supposed to encourage psycholinguistic guessing. The trouble with these was two-fold. First, the Kresh students already guess too much; they do not need a drill to encourage them more.

Secondly, the students and teachers disliked these drills and failed to appreciate their value, largely because of the nonsense involved. One

choice made sense, but the other two were nonsense. Before they could choose the most acceptable alternative, however, they wanted to understand what the choices were. Since two were nonsense, they could make no sense of them. In the earlier lessons, two of the choices were grammatically impossible, such as a verb or adverb where a noun is required. I had thought this might increase awareness of lexical categories, but they found it disagreeable. In later lessons, some choices violated subcategorization restrictions or requirements of person-number concord, which they also found disagreeable.

In some cases the alternatives were all grammatically possible and phonologically similar, but the correct choices yielded sentences that were more sensible. Often the difference was only a matter of tone. The students easily guessed what the word should be, but then had trouble identifying it on the page. It was not enough to say the correct word; they had to indicate if what they were saying was the first, second, or third alternative. This struck them as strange and foreign.

An additional issue was that the Kresh wanted the correct choice to be based on the meaning of the preceding story. Even a plausible sentence, if it was isolated and its references all failed for lack of a context, was a kind of nonsense. It would have been possible to make all the context clue alternatives sensible, with one choice more sensible than the others, which has been successfully done in another language, but what, then, would be the value of the drill? In addition, it would also have been possible to base the alternatives on the preceding story, which would have changed them into comprehension questions. But the stories already had comprehension questions, so we did not try it.

Overall, the drills seemed inappropriate, both in form and in purpose. My struggle was not to encourage the students to guess more, but to get them to look at the words more carefully before guessing at them. As a result, it was decided that the time and space occupied by cloze drills could be better used for supplementary drills, and the cloze drills were dropped from the series.

4. LESSON PLAN

In the back of each volume there are two pages entitled "instructions for the teacher", which describe a simple model lesson plan (in Kresh):

> The teacher reviews, possibly repeats, the lesson(s) from the previous day. The teacher then teaches (models) the illustrated sight word, if there is one, in the new lesson, and he or she teaches drill 1. If the students are slow or the lesson topic is difficult, such as an affix, then the teacher can model drill 2 as well. The other drills are

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then read by volunteer students in turn, and the teacher only corrects or helps as necessary. Various students can then read the entire drill page, each in turn.

Several approaches were tried, but this seemed to work the best. The modeling and imitating, often referred to as "chanting", are traditional in Sudanese formal learning, but the helping or coaching is not. However, coaching is common in traditional non-academic learning outside the classroom, and it has not been inappropriate to incorporate it into the context of teaching the skill of reading. This approach requires, however, that an imaginary line be drawn in the lesson after drill 2, beyond which the teacher will not model and the students will not merely repeat after him or her.

Adult learners often demand the usual classroom chanting. Their experience has taught them to approach reading, like other subjects, as the memorization of facts rather than the acquisition of a skill or habit. They find it troublesome to have to examine the words carefully or to figure out the sentence. Sometimes they will demand that the teacher read the story to them phrase by phrase, over and over, while they repeat back in a chant. This chanting approach succeeds admirably in getting the story memorized, but it does not seem to succeed in developing an ability for independent reading.

Therefore, after the first drill or if necessary the second, there is no more modeling and chanting. If the students have not yet learned the new letter or functor, the teacher can go back over the first and second drill, and then give instruction and practice on writing the new letter. But the teacher does not carry the chanting beyond drill 2.

Other approaches were tried, such as having the teacher read the first line of a drill and the students respond with the second. While the result sounds like the traditional chanting, it is not in fact a traditional approach, and the teachers would not follow it. Another approach was to allow more modeling of the drills, but this usually degenerated into a simple chanting of the whole drill page, including the word-attack drill, and the students did not even need to look at their books to respond.

The teacher then reads the title of the story; volunteers among the best students read the story aloud, while others follow and look for mistakes to correct. One volunteer reads the questions, and the class answers. By this time the slower students have memorized the gist of the story and have read it along several times, so they are ready to take a turn reading it aloud. A shy person may decline to read; he is not forced to embarrass himself.

So the story is read several times, everyone following to check for mistakes. There seems to be great relish, especially among the slower students, in being able to correct or help the reader, and the teacher has to control this. In a small, informal setting, this interaction between the students gives social value to the class and can improve motivation and attendance, but if the teacher is not sensitive in the choice of readers, he or she may end up choosing someone quite unprepared to read, and the subsequent embarrassment can discourage that student. Usually, however, almost everyone wants a chance to read aloud, and especially to read the questions.

A volunteer reads the writing practice, and then the students write it in the copy book several times, while the teacher helps them. A new letter is usually written repeatedly until the student is ready to use it in writing the practice phrase or sentence.

For the name-the-letter drill (box 5), the teacher can model it if necessary, and give the name of the key-word illustration, if it is not obvious. The students take turns reading the names of the letters; they do not need to recite the key-word.

The letters, along with their illustrated keywords, are also displayed in the back of the book, as a reference for the teacher.

The students take turns reading the supplementary exercises in drill 6.

The students should review the lesson at home, along with previous lessons.

In the second volume (lessons 88 to 137), the teacher may ask the students to write a short letter or story, mostly using words they know.

5. ADDITIONAL READERS

We have the usual post-primer books of tales and stories, both old and new, but one book has been especially useful and motivating. This is a book of stories that teach health and nutrition. It was freely translated, with extensive input by a Kresh doctor, from an English translation of 'How to be Healthy', first published in the Babungo language of Cameroon. (It is available from the Cameroon Branch.)

Initially we worked on reviewing and testing the book, to teach reviewing and testing skills. We found that there are advantages to starting with secular materials, because the reviewers feel more comfortable and

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free. At the same time the book addressed a felt need and stirred more interest in reading Kresh. The cassette version is popular and is encouraging the acceptance of audio materials in Kresh. Public readings from this book at gatherings have increased people's vision of fluent reading and their vision for the usefulness of written Kresh.

6. MEDIA

The primer series is printed in two volumes of 144 and 172 A5 pages. We used to print in volumes of about 60-70 half-foolscap pages, but that presented several difficulties. One was seeing that everyone gets all the volumes in the series. In the non-formal setting, the difficulty is obvious. In the school setting, it is also a problem. The custom is to distribute the books at the beginning of the year and spend the year teaching them. A distribution in the middle of the year might not happen.

In addition, the teachers assume they should stretch a single book over the whole year, which slows the program down. It also happens that when demand exceeds supply, to keep things fair, one school will be given copies of part one, another school copies of part two, another copies of part three, etc. So it seems better to bind the primer parts together to make one volume for each year.

The books are printed out on a laserjet and offset locally. The nice fonts are appreciated, but more valued are the illustrations. I have inserted a few illustrations for stories, and the name-the-letter drills have keyword illustrations, but I wish we had illustrations for the functor lessons and for more of the stories. One motivation the Kresh have for learning to read is to affirm their ethnic value and improve their self-esteem. Thus it is important to them that their books look attractive and professional, and that they use culturally authentic illustrations. As a result, I have seen the physical improvement of our books lead to an increase in interest in the literacy program.

7. MOTIVATION

Some elements of motivation have been mentioned earlier, including the availability of valued materials in Kresh, the quality of the printing, and the number and quality of the illustrations. Cassette tapes have helped to make some materials known and valued. There is also a motivational page at the end of each primer volume and one of the post-primers. In the primers, the motivational page follows the teacher's instructions, and teachers are encouraged to discuss it with inquirers and new students and from time to time thereafter.

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The points raised in this page had been discussed with educators, but not until recently with students. I mention it here because inclusion of this page proved to be a highly motivational device which created helpful discussion in the community. It is translated below, with some implicit information supplied between brackets:

> Why should a Kresh person learn to read the Kresh language? The reasons are many. First, so that he may discover how to read quickly with understanding. For if he cannot understand material [in another language] with his ears, how will he [be able to] read it quickly with understanding? But if he comes to the point of reading quickly in his own language, it means that his brain has opened up well to the way of reading. Therefore, he should [now] have the capacity to learn to read quickly in another language as well.
>
> Another reason is so that he might give thought to the way of speaking the Kresh language, that is, its grammar. If he comes to understand the way of his own language, it will not be so difficult to understand the way of another language.
>
> In addition, if a person does [all] this, his thinking will open as a result. And the good, wise materials which have been written in the Kresh language, if he reads them, he will will understand them clearly, and it will benefit him well.
>
> And if he knows how to read and write in the Kresh language, he will preserve his own dear language, he will know his place, and he will consider himself to be someone.
>
> And if a child studies something without understanding it [because the books are in a strange language], he may decide he has no ability [for education]; his heart may not be pleased to continue [in school]; he may not put his mind to it, and he may leave [school]. Therefore, it will benefit him to begin his studies in the Kresh language.

Besides the discussions and interest that this page has aroused, interest in Kresh literacy has also been stimulated recently by the production and sale of a Kresh calendar. Kresh teachers have also been encouraged in their studies by promise of an award T-shirt inscribed with "I read the Kresh Language", beneath the picture of an elephant. These are promotional ideas that have worked elsewhere, and they work among the Kresh as well.

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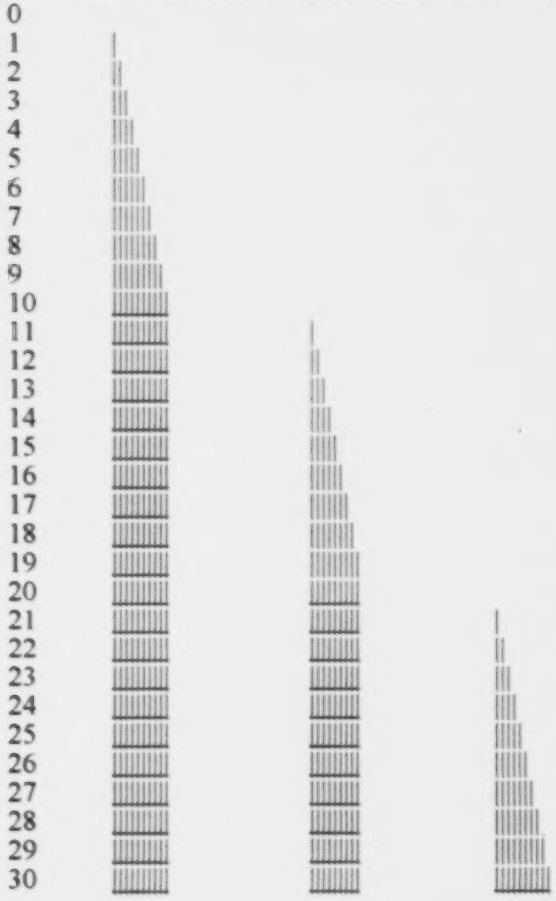
8. CONCLUSION

These notes have concerned aspects of our search for the right nuts and bolts for the Kresh literacy materials. They might not apply with other language groups in other places, and many points have no doubt been implemented elsewhere. But I wish, when I began developing Kresh teachers and literacy materials in 1980, that I had known more of these things then.

INTRODUCTION TO KRESH NUMERACY SYSTEM



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METHODOLOGICAL CONSIDERATIONS IN TEACHING READING TO ETHNIC MINORITY CHILDREN

Marilyn J. Gregerson

Ken and Marilyn Gregerson joined SIL in 1960. Marilyn earned the PhD degree in Anthropology in 1991 from the University of Texas at Arlington. This article is an edited version of a paper presented (in Vietnamese) at the Workshop on Consolidation and Development of Education for Children of the Ethnic Minority Groups in the Northern Highland Areas, sponsored by the Ministry of Education and Training of the Socialist Republic of Viet Nam, Lao Cai, Vietnam, January 7-8, 1994. The Gregersons are currently in Thailand.

THE CASE FOR MOTHER-TONGUE LITERACY

Every year more evidence emerges from around the world to support the notion that it is distinctly advantageous for ethnic minority children to begin their education in the language they know best—very often the speech native to their own local cultural community. In this regard, it is still relevant to note the 1953 UNESCO meeting of specialists on the use of vernacular languages in education which produced the following statements:

> ...it is axiomatic that the best medium for teaching a child is his mother tongue (UNESCO, p. 11).
>
> Some people claim that it is impossible for children to acquire a good use of the second language unless the school adopts the second language as a medium of instruction from the very beginning. In fact, it is on the basis of this action that some schools in the past have actually forbidden any use whatsoever of the vernacular anywhere in the school. However, recent experience in many places proves that an equal or better command of the second language can be imparted if the school begins with the mother tongue as the medium of instruction,

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> subsequently introducing the second language as a subject of instruction (UNESCO, p. 49).
>
> ...it is our conviction that these peoples should...approach the second language through the mother tongue. We believe that, in the end, their best interests will be the better served in that way. Even though they must ultimately learn to think and speak and read in the second language, this goal is, we believe psychologically and pedagogically as a rule best achieved by two short jumps (that is, from illiteracy to literacy in the mother tongue, and from literacy in the mother tongue to literacy in a second language) (UNESCO 1953: 56).

UNESCO conferences held since 1953 have reiterated this view again and again.

To see how this viewpoint applies in the Vietnam context, we need more studies comparing the results of tests taken by children who have begun their education in their mother tongue with the results of tests taken by children in the same area, with similar milieus, who have only been taught in the national language. The four studies cited below are examples of research which endeavors to respond to this question.

Case 1: Chiapas, Mexico

Nancy Modiano studied the educational system used in Indian speaking areas of the state of Chiapas in Mexico. She wanted to compare the results of tests taken by children who had only been taught in the national language, Spanish, with those taken by children who had begun their education in their own mother tongue and then had later switched to education in Spanish.

In the bilingual schools, the children were introduced to reading in their own mother tongue in the first year. They were also introduced to Spanish but to oral Spanish only, not written Spanish. In the following year, they continued instruction in the mother tongue and began to learn to read in Spanish.

When she began her research, Modiano's assumption was that after three years the children who had had all of their education in Spanish would do better on Spanish exams than the children who had spent their

first two years in school being educated in their mother tongue. After three years in school, children in 26 schools were tested. Modiano discovered that those children who had had their beginning schooling in the mother tongue did better on the Spanish exams than those children who had received instruction only in Spanish from the beginning. She was surprised, because the results came out to be exactly the opposite of what she had hypothesized would be the case (Modiano 1973).

Case 2: The Navajo Indian Rock Point School, USA

In 1968, the United States Congress passed the Bilingual Education Act. That legislation gave permission to school districts to provide bilingual education for children who were speakers of languages other than English. They knew it would be impossible to provide bilingual education for all children whose mother tongue was not English, because in the city of Los Angeles alone there are 400 different languages which are the mother tongues of children just in that one city. So, of course, they did not attempt to provide bilingual education in all 400 languages. The largest group, however, in Los Angeles and in many of the southern states of the U.S. is composed of those whose mother tongue is Spanish. In many of those areas, bilingual education is now available in Spanish and English.

In one indigenous ethnic minority area of the United States (i.e. parts of the states of New Mexico, Arizona, Utah and Colorado), there are many schools where the Navajo language is the mother tongue of the majority of the students. In one area there were eight schools, all of which had a majority of Navajo children in each school. One of those schools, the Rock Point School, chose to provide bilingual education for the children while the other seven schools chose to continue an all-English curriculum. The Rock Point School "...curriculum involves 70% instruction in Navajo in kindergarten, 50% instruction in Navajo in grades 1 and 2, and 20% in grades 3 through 6" (Dutcher 1982:36). English was taught orally as a spoken language in kindergarten and Grade 1, but the children learned to read in their own mother tongue, Navajo. In Grade 2 they began to read in English. Only after they could read well in Navajo and had learned to speak English, did they learn to

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read in English. In Grades 3 to 6, 20% of content instruction was in Navajo and the other 80% in English.

At the end of Grade 6, i.e. after seven years of schooling, the children in all eight schools took a national examination in English. The children in the Rock Point School tested two years in advance of the children in the other seven schools. That is, the test results showed that the Rock Point children were equivalent to to the 6th grade norm on the national level, while the children in the other seven Navajo schools tested at only Grade 4 level though all of them had been in school for the same length of time. These test results showed conclusively that Navajo children who began their schooling in their own language ultimately did the best in the second language as well (Rosier and Farella 1976, Spolsky 1978).

Case 3: Minority language students in Thailand

In a study done in Thailand, Barbara Robson compared the test scores in English of children who had first learned to read in a minority language with the test scores of children of the same ethnic group who had never read their own language. The children who had learned to read in their own mother tongue tested higher on English tests than those children who had never learned to read their own language (Robson 1981).

Case 4: Papua New Guinea

The Papua New Guinea government, after years of comparative testing, has determined that it is advantageous to children to learn to read first in their own language. In addition, the government has determined that they will put a school in every village. These village schools will provide instruction for the first two years in the mother tongue and then the language of instruction will shift to the national language which is English. If Papua New Guinea had only 50 some languages, it would not seem such a formidable task, but more than 700 languages are spoken in that small country of only three million people. Some languages are spoken by as few as 300 people. Nevertheless, they have decided on a course of bilingual education even though their resources are small and the task is great.

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METHODOLOGY IN TEACHING READING

As Vietnam considers the task of eradicating illiteracy in the mother tongues of ethnic minority children, clearly it is important to consider the best possible way of doing so. In this regard, one may cite two basic viewpoints on the methodology of teaching reading and writing.

One is a "top-down" methodology in which the teacher takes a story and by going over it again and again, the students learn to read by reading a story. This is exemplified in "The big book method" used in "whole language methods."

The second approach is the "bottom-up" method where students learn the basic elements—the letters and syllables, and use this as a basis to learn to read. Most of the reading books that I have seen in Vietnam use this "bottom-up" method of learning to read. Frank Laubach's syllable method, used in many places in the world, also is a "bottom-up" method.

Advocates of the whole language method argue that the "top-down" methodology is the beter approach to teaching reading because they believe the most important consideration is learning to read for meaning or comprehension, i.e. to understand a message. Advocates of the syllable method hold that it is crucial for students to learn the basic elements of sounds and letters and syllables and to use this knowledge to "decode" anything in the language. Thus, a knowledge of phonics leads to a knowledge of the meaning of the text.

The best methodology for teaching students to read would appear to be one which acknowledges the concerns addressed in both approaches—one which emphasizes that reading is for meaning, but at the same time also teaches the analytical skills that enable the students to be able to sound out words that they have never seen before.

One such method was developed by Dr. Sarah Gudschinsky of the Summer Institute of Linguistics (Lee, 1980). In this method, the letters, tones, and word parts are introduced sytstematically beginning with the most common elements and continuing through the least common sounds and letters. After the first lesson, in which three or four letters are taught (Lee 1982:172), only one new sound, tone, or word part is

introduced in each lesson. The method of introducing the new letter is by a key word. Every lesson, even the first one, has a story. Words or syllables are never spelled out orally, but every lesson has syllable drills and a writing lesson. No word ever appears on a page of the reading primer unless it can be read orally—thus a consonant never appears by itself but always with a vowel.

The Gudschinsky method is considered to be "meaning-based reading" because although it gives the student experience in analyzing parts of words, it also gives the student a holistic view of language in that every lesson involves a story and the teacher interacts with the students to achieve comprehension of that story.

Learning is most effective if it is an interactive process—the children don't just sit and listen to what the teacher is saying but they also think about what they are reading. The teacher may, for example, ask them content questions about what they are reading such as: "Where did Tuân go?" "Who went with Tuân?" "What did Tuân's mother tell him to do?" Such questions, among other techniques, help the student appreciate that reading is fundamentally linked with comprehension.

Mary Stringer of the Summer Institute of Linguistics, working in Papua New Guinea, has been experimenting with what she calls "the multistrategy method" of teaching reading (Stringer and Faraclas, 1990; Stringer 1992). Each student comes to two different sessions each day: one session is called "the workbook track" in which the student follows his book, learns a key word, reads the story in the book, goes through drills that teach him a new letter or word part, and learns to write the new letter or word part.

In the second session, "the story track", interaction between students and teacher is emphasized. For example, the teacher may choose the key word "chicken" and bring to class with her a live chicken. The students will watch what the chicken does and perhaps see it hop off the teacher's desk. As they watch it, they may hear the teacher say, "Tell me a story about a chicken." One of the children might then tell her a story about a chicken or some chickens. As the child tells her the story, the teacher writes the story on the chalkboard. After the story is on the board, the teacher reads the story pointing to each word as she reads it.

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She goes over the story with the children three times, and then asks one child to read one line and another child to read another line, etc. through the story. Then she asks questions such as, "Who can come up and point to every word in the story that says "chicken"?" "Who can find the word "fox" in the story?" "Who can find Tuân's name in the story?" etc.

Another of those ways is to write out a song (in their language) that many children already know by heart, and then for the teacher to point to each word as the song is sung. Poems or proverbs might also be used in the same way. The whole point is that children need to approach reading from as many perspectives as possible.

Providing a pool of literature in their own language is the crux for motivating children to learn to read. These books must be interesting to them—ideally on topics that they want to learn to read. To meet these needs, native speakers of the language should be encouraged to to create literature in their own language. In some cases, people who can read and write can record on paper the accounts related to them in the language by recognized storytellers. In this way, even people who may not themselves be literate can help provide books for others to read.

A PERSONAL EXPERIENCE

Twenty years ago, my husband and I did research on the Rengao language of Kontum province, where some 10,000 to 15,000 speakers live in perhaps 37 villages located to the north of Kontum City.

A young man, a native speaker of Rengao who had only seven years of schooling and who was extremely intelligent, helped us develop reading books to teach Rengao children to read their own language. Following Gudschinsky principles on making reading primers, this young man wrote natural stories using the vowels and consonants that had already been taught. I produced drafts of stories for the first four lessons but he wrote all of the stories for the other 145 lessons in the reading primers. All lessons were designed to be taught in kindergarten, the year before the children entered Grade One. The stories this young man wrote were drawn from the everyday life of Rengao people, and the cultural world familiar to them. (He didn't write on political matters.)

Some asked, "Why bother to make books for the Rengao? They aren't very important and there are only 10,000 to 15,000 speakers of this language. Why go to all the trouble and expense?" But we knew that Rengao children could not understand Vietnamese, nor for that matter could they understand other neighboring minority languages such as Bahnar or Sedang. Since they needed books in their own language, we spent several months preparing materials that provided them an entrance point into initial education via their own culture.

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THE REPRESENTATION OF TONES IN THE ORTHOGRAPHY

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This article is an edited excerpt from Dr. Ettien's dissertation The Interface Between Phonology and Morpho(phono)logy in the Standardization of Anyi Orthography (pages 97-109), of which the abstract appeared in issue 18.3 of NOL.

The orthographic representation of tones has raised a major controversy with three different views commonly expressed in the literature. Some linguists argue that tones should not be written in the orthography. Crofts (1976) and non-linguist missionaries hold such a position. Other linguists, including Thayer (1981) recommend a selective marking of tone. Still others, Gudschinsky (1970), Wiesemann (1989), and Longacre (1953, 1964), argue that tones should be written fully in the orthography. Let us first analyze these three positions and then examine how tones should be written in Anyi orthography.

TONELESS ORTHOGRAPHY

Pike (1946:252) notes that those who hold the position of toneless orthography claim that "the natives do not need the extra symbols (tone marking), since they can guess what the words mean without them because the context makes it clear." Crofts (1976:129), one of the supporters of a toneless orthography, found in her study that readers have no trouble when tone is not written in the orthography. Moreover, she contends that "marking tone on every syllable would greatly increase the difficulty in teaching people to read, perhaps discourage older folks from ever learning. And it would increase publishing costs considerably." However, other studies, including Gudschinsky (1970), Wiesemann (1989), Longacre (1953,1964), and Pike (1946), have shown that the context does not help very much in toneless orthographies. The following quotation found in Gudschinsky (1970:23) attests to the fact that the context does not help.

An intelligent, educated native speaker of a tone language of West Africa was asked to read a page from a primer in his own language. He remained staring at the page without speaking for so long that the people

around him became embarrassed. Finally they said, "Never mind. It's quite all right if you don't want to read it." The African replied, "Oh, no, no. I'll be ready in a minute. It's just that I haven't figured out yet what it is supposed to say, so I don't know what tone to read it with."

Pike (1946:252) rejects toneless orthography because he contends that "it encourages bad reading habits by forcing the beginner to read ahead, for contextual clues, and then turn back to guess the meaning of earlier words." Gudschinsky (1970:24) provides another example which emphasizes how a toneless orthography can create bad reading habits.

> A native speaker of a Bantu language of Rhodesia was asked: "Does the fact that tone in your language is not written make any problems when people read it?" He replied immediately, "No. Not at all. Everybody learns to read and has no problem." He was then asked, "But don't people sometimes have to read things twice? Once to know what it says and once to read it correctly?" With a look of shocked surprise, he said, "Oh! Is that why we read our own language back and forth? We always say that we read our own language back and forth and back and forth, but we read English straight along. We can read English in about half the time that it takes to read our own language, but never knew why."

The problems encountered by readers when tones are not marked in the orthography seem be very widespread. Lucht (1978:26) provides the following example from Siane, a language spoken in Papua New Guinea. What makes this example unique is that the reader is also the writer of the text.

> It is because of tone that I've had to go back and reread several times what I wrote the day before in order to know what I meant on this translation work I've been doing. We all have to do something about it. What shall we do?

SELECTIVE TONE MARKING

The linguists who encourage the use of selective tone marking recommend that tones be marked in the orthography only when it is necessary to disambiguate lexical or syntactic structures. This approach seems like an improvement over toneless orthography. However, Wiesemann (1989:16), Longacre (1964:132-3), and Smalley (1964:41) claim that selective tone marking should be avoided. Wiesemann gives the following reason for rejecting selective tone marking:

> It should be mentioned here that a system which marks tone where it is minimally different in individual words is not a good system. In such a system, for each individual word one must learn

whether it carries a tone mark or not. To mark low tones only on words where there is a minimal tone pair makes the teaching of tone a matter of memory, rather than a matter of rules linked to pronunciation.

Longacre (1964:133) argues that selective tone marking "presupposes that one has already made a list of all the words in the language to see which ones are minimal pairs. Such a claim is pretentious since most newly written languages do not have good dictionaries." Smalley (1964:41) also rejects selective tone marking because "it represents the speech system of the language in such an inconsistent way, it compounds the learning problem seriously and, in many cases, means that the reader never learns to use the tone symbols at all because he meets them in such an inconsistent fashion."

TONE ORTHOGRAPHY

Since toneless orthography and selective tone marking have been rejected as viable solutions, the only option left is an orthography that represents tones. A number of guidelines have been proposed to avoid overloading the orthography with tonal diacritics. Wiesemann (1989:16) argues that it is not good to write all tone nuances because "the more tones that are marked, the harder it becomes to teach the system." Therefore, for the discussion of the orthographic representation of Anyi tones, I will resort to Williamson's (1984:42) Tone Economy Principle (Section 1.6.4). She proposes that the most common tone be left unmarked.

LEXICAL FUNCTIONS OF ANYI TONES

Anyi has two level tones, High and Low, and two contour tones High-Low and Low-High. The most important function of tones at the lexical level is to differentiate nouns. This means that words such as **tee** (sin, ugly) and **tee** (fishing net) differ only because they have different tonal configurations. The first has a Low-High pattern, and the second a High-Low pattern.

Monosyllabic nouns can have either High tones or Low tones. However, Low tones are more frequent than High tones. Low tones are said to be unmarked. In CV_1V_2 and polysyllabic words the Low-High contour tone is more frequent than the High-Low contour tone. High-High and Low-Low patterns are extremely rare. They tend to occur only in ideophonic words.

GRAMMATICAL FUNCTION OF TONES

Unlike nouns, verbs *do not have a lexical differentiation function at the systematic phonemic level.* It is only when they are used in tensed

constructions that they acquire a distinctive function. Tone placement on verbs is characterized by a number of morpheme structure constraints:

Positive Tone Placement Constraints

1. On monosyllabic words

   All monosyllabic verbs have a High tone on the vowel.

2. On CV_1V_2 and $C_1V1C_2V_2$ verbs[1]

   All CV_1V_2 verbs and $C_1V_1C_2V_2$ verbs have a Low tone on the first vowel and a High tone on the second vowel.

The tone pattern of Anyi verbs at the systematic phonemic level can be summarized as follows:

Monosyllabic verbs:	CV (High tone on V)
CV_1V_2 verbs:	C V_1V_2 (Low tone on V_1, High tone on V_2)
Disyllabic verbs:	CV_1CV_2 (Low tone on V_1, High tone on V_2)

In the underlying representation a verb such as nŒn (to drink) always has a High tone (see examples 32a through 32d below.) However, when it occurs in some sentences, its High tone is sometimes changed into a Low tone.

Negative Tone Placement Constraints

There are two tone placement constraints on CV_1V_2 and $C_1V_1C_2V_2$ or CV_1GV_2 words:

1. On CV_1V_2 verbs

There is no CV_1V_2 verb stem in which V_1 has a High tone and V_2 a Low tone.

2. On $C_1V_1C_2V_2$ and CV_1GV_2 words

There are no words of the structure $C_1V_1C_2V_2$ and CV_1GV_2 where V_1 has a contour tone.

SOME GRAMMATICAL FUNCTIONS OF ANYI TONES

Abena (1985:1) argues that in Akan "the functional load carried by tone is more frequent at the level of grammar than at the lexical level." In Anyi the tone on verbs fulfills important grammatical functions as exemplified by the sentences below. Sentences (32a) through (32d) below illustrate cases where a change in the tonal configuration of the verb and its adjacent subject pronoun introduces new semantic changes.

---

[1] CV_1V_2 verbs behave strangely. They can reduplicate either as disyllabic words or as monosyllabic words.

(32) a. Habitual aspect: **Mɪn nʊn nzaán**

I drink wine

I drink (it is not a taboo)

(Low tone on **Mɪn**, High tone on **nʊn**)

b. Intentional mood: **Mɪn nʊn nzaán**

I (intend to) drink

(High tone on **Mɪn**, High tone on **nʊn**)

c. Future: **Mɪn nʊn nzaán**

I will drink wine

(High tone on **Mɪn**, High tone on **nʊn**)

d. Declarative sentence: **Mɪn nʊn nzaán**

I drink wine (factual statement)

(Low tone on **Mɪn** and **nʊn**)

Semantically, it is generally argued that a sentence is in the intentional mood when the subject is in the first person singular, and the action expressed by the verb focuses on the intention of the speaker. It is, however, very hard to distinguish it from the simple future. The habitual aspect, on the other hand, expresses actions that are performed over and over as a matter of habit. The difference between the declarative and the habitual is sometimes fuzzy since it may be that the same person is making a statement about a habitual action.

What is worth noting in these examples in relation to Anyi orthography is that in these structures, the tones on the verb and the subject pronoun change occasionally. Let us start with the verb first. In (32a) through (32c) the verb has its original High tone. But in (32d) the original High tone of **nʊn** changes to a Low tone. Remark that the tonal configuration on the verb alone cannot help us distinguish between (32a), (32b), and (32c) because in these three sentences the verb ***nʊn*** has the same High tone. It is the tone on the pronominal subject that helps make these distinctions. In addition to the tone of the verb, the tone of the subject pronoun is important in distinguishing between (32a) through (32d). In (32a) and (32d) the pronominal pronoun has a low tone. In (32b) and (32c) it has high tone. Now let us take both the tone of the verb and the tone of the pronoun into account and compare (32a) and (32b).

It would be costly in terms of space to go through each case. The example of (32a) and (32b) will suffice to highlight the necessity of writing tone in the orthography

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(32a) and (32b) vary in one respect only, that is, the tone of the pronoun in (32a) is a Low and that of (32b) is a High. Both have a High tone on the verb. This means that if nothing is done to signal this difference in the orthography, in a written text a reader may find himself with an ambiguous sentence. In order to understand such a sentence he would have, first, to read ahead to understand the context. It is only when he has understood the context that he can determine what the proper tone should be. As noted in Section 2.9.1, this can be a frustrating experience in a situation where reading aloud is called for. A toneless orthography puts an intolerable burden on the reader. The reader's task could be made easier just by marking the tone on the **Mɪn** of the intentional mood and not marking it on the habitual aspect.

THE REPRESENTATION OF TONES IN THE ORTHOGRAPHY

The grammatical functions of tones discussed above make it a necessity to represent them in the Anyi orthography. Longacre (1964:136-7), Nida (1964b:26-7), and Wiesemann (1989:16) agree that when tone changes affect verb tenses and pronominal subjects, tones should necessarily be marked in the orthography. Consequently, Anyi tones need to be represented in the orthography.

> The issue that is raised now is how to write tones and at the same time avoid overloading the orthography. Overloading the orthography is the argument the advocates of toneless orthography have frequently used. They argue that writing tones on every tone-bearing element would overload the orthography and cause a slow down in reading. This is a legitimate concern for which a solution must be found. A solution can be proposed which relies on the universal tendencies of tones discussed by Maddieson (1978:342). He enunciates the following universal tendency in tone languages: "Systems in which high tones are marked [fewer] are more frequent than systems in which low tones are marked."

What this means is that for a language with two level tones such as Anyi, Low tones have a higher frequency than High tones. This observation in conjunction with the Tone Economy Principle can minimize the overload effect in Anyi orthography. The two principles indicate that *only High tones are to be marked in the orthography*. This solution is economical because it saves the writer time since he (she) marks only the least frequent tone, that is *High tone*. The Tone Economy Principle also offers a solution to the technological alibi that the standard typewriter cannot represent contour tones. By suggesting that only High tones be written, it neutralizes the need to represent both High-Low and Low-High tones by the circumflex diacritics "ˆ" and "ˇ" that linguists use to represent rising and falling tones.

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Therefore, in the following CV_1V_1 words (where the two vowels are identical) only the High tone will be marked.

(33) Sequence of two geminate vowels

boó	forest
taá	motherhood
táa	tobacco
tuú	gun
toó	corn meal
túun	dark
atéende	type of tree
baá	child

THE REPRESENTATION OF PHONETIC TONES IN THE ORTHOGRAPHY

The final issue to be addressed has to do with whether or not phonetic tones should be represented in the orthography. It is not irrelevant to ask at this point if phonetic tones too should be marked in the orthography since it has been argued that lexical tones and grammatical tones are to be represented.

Anyi, like many West African languages, is a terrace-level language. This means that as the sentence goes downward, High tones and Low tones are progressively lowered to the extent that sentence final elements are hardly audible. In some instances, a Low tone in sentence initial position is realized higher or as high as the next High tone. Conversely, a High tone in sentence final position is realized lower or as low as a sentence initial or medial Low tone. Terrace-level is caused by two phenomena known as *downstep* and *downdrift*.

Downstep happens when the Low tone responsible for lowering the following High tone has a surface manifestation (Welmers 1973:87). Downdrift, on the other hand, occurs when the Low tone responsible for lowering the following High tone has no surface manifestation. These two can be represented schematically as follows:

Downstep (automatic downstep)

(H) + L + H ----> (H) + L + |H

(``|" preceding H indicates a downstepped high)

Downdrift (non-automatic downstep)

(H) + + H ----> (H)+ + |H

(The blank between the two "+" shows that the Low tone responsible for the downstepped high has no surface manifestation.)

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My position is that phonetic tones need not be represented in the orthography of Anyi, first because they do not fulfill any lexical or grammatical functions in the language. Secondly, representing phonetic tones will necessitate the creation of additional diacritics such as rising slopes, falling slopes, and hosts of other conventions to inform the reader about the overall contour of the sentence. Since an orthography is not a spectrogramme, it will be quite futile to provide such information in the text.

Another argument that militates against representing phonetic tones is that, in many languages and as well as in Anyi, the factors responsible for phonetic tones are not well understood yet. Anderson (1978:138) points out that emotional and expressive factors influence tones. Bolinger (1978:474) claims that pause and intonation affect tones. Hombert (1974:171) argues that there are tone differences between long and short utterances. My decision not to write phonetic tones in the orthography finds additional support from Voorhoeve (1964:130-1). He found in his study of Saramacca, a language spoken in Surinam, that,

> The students had not the slightest difficulty in reading aloud from the text in which the perturbations (phonetic tones) were not noted. . . I would advocate that tonal perturbations which follow fixed rules should not be written in the orthography.

SUMMARY

After having examined the lexical functions and some of the grammatical functions of tones in Anyi, I have come to the conclusion that High tones should be marked in the orthography. I proposed that nominal stems should have their phonemic lexical tones represented in the orthography. Tone marking on verbal stems, on the other hand, should reflect the grammatical function of the construction they occur in. I proposed that tone marking follow the Tone Economy Principle in order to avoid the *overload effect*. Finally, I argued against marking phonetic tones in the orthography, first because they are contentless, and secondly, because they will be difficult to represent.

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1995 CONFERENCES ON READING

The International Reading Association has announced the following 1995 schedule of conferences:

June 22-24 Asian Reading Congress at Singapore, 1995 ARC Programme Committee, c/o Tele-Temps Pte.Ltd., 1002 Toa Payoh Industrial Park, #06-1475, Singapore 1231.

July 12-15 21st National Conference of the Australian Reading Association at Sydney, ARA Sydney Conference Committee, PO Box 257, Gladesville, NSW 2111, Australia.

July 23-27 9th European Conference of Reading at Budapest, Hungary, Viola Batonyi, National Szechenyi Library, H-1827, Budapest, Hungary.

July 29-August 1 32nd Annual Conference of the United Kingdom Reading Association at Winchester, Bobbie Neate, King Alfred's College, Sparkford Rd., Winchester, SO22 4NR, United Kingdom, 0962-827730 or 0962-368836.

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NOTES ON LITERACY

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NOTES ON LITERACY

EDITOR: Judith D. Moine-Boothe

Notes on Literacy is published quarterly by the Summer Institute of Linguistics, Inc., and serves field literacy programs by sharing information of a practical and theoretical nature with literacy field workers. Opinions expressed in this publication do not necessarily express official policy of the Summer Institute of Linguistics, Inc. Permission to use articles, either in full or in part, must be obtained from the editor.

Standing orders for this publication should be placed with:

International Academic Bookstore
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
Dallas, Texas 75236
USA

Readers are invited to submit inquiries, comments, or manuscripts for publication to:

Editor of Notes on Literacy
Summer Institute of Linguistics, Inc.
7500 West Camp Wisdom Road
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ISSN 0737-6707

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ADULT MOTHER TONGUE LITERACY AS DEVELOPED BY GILLBT

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1. INTRODUCTION

A literate population is one of the pressing needs of many developing nations. However, introducing writing and reading skills first in the mother tongue, that is, the language spoken in homes and in the community, and then establishing the use of these skills in both local and national languages is a slow process. In an oral society, a tradition of using skills of writing and reading is nonexistent. Somehow, if this pressing need is to be addressed, a new tradition must be established.

Introducing the skills of writing and reading into an oral society is a little bit like mixing water and oil. With much agitation and much activity, the oil will be distributed throughout the water but the oil does not penetrate the water. When the agitation stops, the oil separates from the water.

Literacy programs have often been enthusiastically promoted with a promise of reward, but when the enthusiasm or motivation or rewards cease, there is no continued use of those skills. Two opposing forces are noted: (1) the need to maintain the status quo, versus (2) the promotion of a new element into the society. To state this from a different perspective, if the impetus for a change touches only the surface of the society, the change does not continue after the impetus is exhausted. When there is only a surge of enthusiasm, nothing permanent remains when the enthusiasm is spent.

What will be the agent, the catalyst, which will break down these two opposing forces and allow 'oil and water' to remain mixed?

The Ghana Institute of Linguistics, Literacy, and Bible Translation (GILLBT) has seen much success in the role of catalyst. GILLBT has given attention to several social areas to ease the entrance of literacy skills into many local societies. Three strategies are well worth noting:

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- Skills are presented in a favorable socio-linguistic context. The written form of the language accurately represents the spoken form.
- Motivation of the society is stimulated at grass roots level.
- Community participation in all aspects of the literacy program, from selecting the teachers to preparing and distributing literature, is regarded as essential.
- When the outside influence of GILLBT is removed, it is likely that literacy will continue because 'literateness' has become valued in the local social milieu.

2. GILLBT INVOLVEMENT

Linguistic analysis—a prerequisite for literacy in previously unwritten languages—was begun in some Ghanaian languages in 1962 under the auspices of the Summer Institute of Linguistics (SIL), working under an agreement with the Institute of African Studies, University of Ghana, Legon. In 1980, administration of all work was assumed by the Ghana Institute of Linguistics, Literacy, and Bible Translation. At present GILLBT is actively administering work in twenty-six language groups and acts in a consultant role in four other language communities.

Initial literacy work was begun early in the linguistic study to test the appropriateness of the selected alphabets. In 1976 the first literacy programs were started in eleven language communities with funding from Evangelische Zentralstelle Fuer Entwiecklungshife (EZE). The largest language group had an estimated population of 350,000 and the smallest about 4,000.

For the programs to become truly indigenous, the concept of 'literateness as a community value' needed to penetrate the social structure of the communities. Authority for the development of the programs was shared, and local authority structures usually provided the infrastructure.

Many individuals of the societies involved in these beginning programs had little feeling of self-worth with regard to their language. Their desire was to learn to speak the language of wider communication used in the school. In northern Ghana this was English. Some, however, were motivated for mother tongue literacy by the knowledge that Scriptures were being translated into their mother tongues.

Among the Konkomba a few people responded to the literacy team's explanation that reading and writing skills could be more easily acquired in the mother tongue than in English. When their communities saw that these people could not only use written Konkomba but were learning to read and write English more easily, interest in Konkomba literacy developed rapidly.

There is much current discussion of the need to maintain cultural values in each Ghanaian community. Mother tongue literacy contributes substantially both to this goal and to national goals as well. Increased confidence in the learners' own abilities opens the way on both levels. It has not been uncommon that adults, having learned to read in their own language, entered the public school system (along with children) and advanced rapidly in reading and writing English.

Although the greatest motivation has usually been to learn to read Scriptures, classes have always been open to entire communities and not limited to any one group.

3. INFRASTRUCTURE

Responsibility for a cultural introduction of these nontraditional skills fell to the guidance and leadership of the chief and elders of each village. The value of literacy skills to the community, the plans for starting classes, and the anticipated goals were clearly explained to the leaders by the literacy team with thorough discussion. Leaders were invited to participate and to be responsible for progress. In many cases they chose the ones to be trained as teachers and closely monitored class progress. Adults and youths not in the public school sector have been the literacy target groups since the beginning of the literacy programs.

Cooperation with government departments involved in adult activities has always been important. The Department of Community Development has cooperated in the celebration of Literacy Days as the culmination of a year's classes. The demonstration of accomplishment and the awarding of certificates highlight these celebrations, which are usually attended by the entire community. The certificates carry genuine prestige because they represent the students' fulfillment of requirements determined by the Department of Community Development.

Whenever possible, traditional learning styles are followed in the classes. At some point, however, there must be instruction specific to reading and writing. In one project the GILLBT team began teaching

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interested people who were visitors in their home. As these few became excited about what they were learning to do, they in turn began to teach their own visitors the new skills. Soon interest in literacy began to permeate the village.

4. PROGRAM DEVELOPMENT

Four types of materials are needed for the literacy programs developed in Ghana. *Pedagogical materials* are needed because these languages have previously been unwritten. The materials are prepared as carefully as possible to correspond with the structure of the language that the instructor already knows. Subject matter is geared to be immediately usable in everyday situations.

People who have attained literacy usually learned the skills of writing and reading in English or another Ghanaian language. They have not focused on the structure, either phonological or grammatical, of their own language. Such people need assistance in making the transfer of their literacy skills into their mother tongue, but they do not need to learn the basic concepts of writing and reading all over again. Therefore, special *transition books* are prepared to introduce them to reading and writing their own language, beginning with features common to both the mother tongue and the one in which they have already acquired the skill of literacy. Thus, they become aware of the uniqueness of their own language.

An abundance of *literature* in the mother tongue is necessary for new, struggling readers to gain confidence and fluency in the reading process, and to learn how to enjoy it or to discover its value as a source of vital information. Although initial literature may be prepared by the linguists from folk material, it is the desire of GILLBT to encourage speakers of the language to prepare their own literature. This is done by holding workshops to train people in writing and then in printing their material by silk screen or mimeograph. Literature production and promotion give excellent opportunity for full community involvement and responsibility.

As mentioned earlier, many people want to become literate in English. *Bridge materials* are prepared in many of the language programs for use when people become fluent in mother tongue writing and reading. The first step is the introduction of oral English. When students can begin to communicate their thoughts in oral English, they are introduced to written English. However, many begin the process almost immediately, using the letters of their own language alphabet.

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Abu is an example of the above. He became fluent in writing and reading his mother tongue. Then he participated in an oral English class, but had not yet progressed into the advanced class of written English. One day he left a gift of fruit on my rain barrel, with this message written in charcoal on the lid: *nana I giv yu dis*. He could communicate in written English what he could say! He was functional in the English he had mastered.

5. VOLUNTEERISM

In some literacy programs, as indicated above, teaching is completely informal with one person showing another. In other programs, classes are organized, and teachers are given thorough training. Times and places of meetings are determined by the people in the group.

GILLBT has in part based the expansion of its literacy programs on the importance of volunteer activities. If all literacy funding comes only from outside the community then literacy activity is likely to stop when the outside source dries up. Therefore, teachers in all programs are volunteers. Even many part-time supervisors are volunteers.

In many areas volunteer teachers and part-time supervisors receive informal reimbursement from those whom they assist. Salaries require a continuous supply of funds. While GILLBT has received assistance from agencies outside Ghana, the money has been used to provide necessary materials and to finance in-depth training.

Many of the literacy programs are now becoming self-managing. Therefore GILLBT has encouraged local communities to think of ways to generate funds for literacy maintenance. This is a new concept for Ghanaian communities and will take some time to become part of local tradition.

6. THE FUTURE

For literacy activities to be self-sustaining, motivation and guidance must come from within the language community. Salifu Mogre has been instrumental in introducing and developing the concept of literacy committees within each language community. Seminars are held in the community to explain to everyone the nature and responsibilities of the literacy committee.

These committees are made up of concerned, interested, and understanding people who work voluntarily within their own communities.

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Committee members must understand the value of mother tongue literacy and desire it for the community. They must understand the financial needs of a continuing program. Guidance on the expansion of literacy within that community will come from the literacy committee. In the few years since literacy committees have been operating, progress in smooth functioning literacy programs is becoming evident.

7. SUMMARY

GILLBT's approach to literacy has produced positive results. In summary, the following factors appear to have been the main contributors to the establishment of solid programs:

1. Careful linguistic analysis was done by people trained in the procedure. Resultant orthographies represent the innate phonological structure which speakers have intuited from early childhood.

2. Primers were written to reflect the language and social experience of the people.

3. Introduction of literacy followed accepted lines of authority. Community infrastructure already in existence introduced the 'foreign' concept of writing and reading.

4. Traditional styles of initiating and disseminating new ideas were followed.

5. Achievement was recognized in a traditional way by holding festive days for an entire area, not just one village. These 'Literacy Days' have become very popular and figure prominently in motivating all levels of personnel, from supervisors to students, to work diligently.

8. CONCLUSION

If a society is to move from preliteracy to a state of literateness where skills of literacy are valued and utilized, the changes must come through culturally accepted structures and by community decision. Only then will literateness be viewed as desirable, as possible, and as something that can and must be maintained.

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A MODEL FOR READING METHODOLOGIES: FOUR BASIC ELEMENTS

Robin Rempel, Papua New Guinea

Robin Rempel has worked in Papua New Guinea since 1986 as a literacy consultant and workshop director. She has been a member of the Summer Institute of Linguistics since 1982.

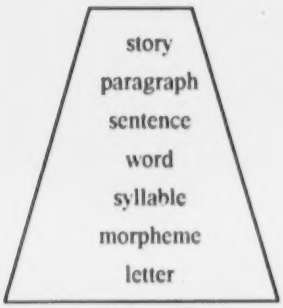
Outline

1. Background: A Balanced Model
2. Whole Stories
3. Creative Writing
4. Word Attack
5. Spelling
6. Integration
7. Preparation Elements
8. The Model as a Tool

Appendix

References

LINGUISTIC HIERARCHY



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1. BACKGROUND: A BALANCED MODEL

A task force composed of ten literacy consultants currently working throughout the linguistically diverse country of Papua New Guinea (PNG) quickly agreed upon four basic elements necessary for the creation of a literacy delivery system that would produce balanced literates. The task force members came from Asian, Australian and American backgrounds and represented a broad range of experience, theoretical persuasion and background.

The goal to produce fluent literates with good word attack skills who can write creatively yet accurately, helped us see clearly what basic elements are needed in a balanced literacy teaching methodology.

Although consultant backgrounds ranged from predominantly whole language to syllabic or phonic emphases to strongly eclectic and interactive preferences, there was no extremism. There was an openness to and an acceptance of the strengths and weaknesses of individual biases. As a result of our open discussion it soon became apparent that all strategies were either 'top-down', 'bottom-up', or a combination of the two approaches. Since sound literacy acquisition involves both reading and writing, the following model took shape:

	Top-Down	Bottom-Up
Reading		
Writing		

Filling in the matrix will give us the four foundational pillars to a sturdy literacy delivery system. Top-down (T-D) reading consists primarily of whole stories written in natural discourse. T-D writing encourages students to create whole stories focusing on story content (Holdaway 1979).

Bottom-up (B-U) writing strategy emphasizes technical accuracy in spelling and letter formation. Finally, B-U reading primarily emphasizes non-contextual word attack skills via phonics (letters or sounds), syllable, or morphemic strategies (Gudschinsky 1975).

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	Top-Down	Bottom-Up
Reading	**Whole Stories** in natural discourse	**Word Attack** phon/syll/morph
	M & C	
Writing	**Creative Writing**	**Letter Form Spelling**

The core of the model is 'Meaning and Comprehension' (M & C) of written text. This is the ultimate literacy goal. All reading and writing strategies need to come from and lead to this central purpose.

2. WHOLE STORIES

A top-down reading strategy generally starts with reading and tracking (using neurological impress method) entire stories that are interesting or beneficial to the reader. There are no constraints on what stories to use except that they do need to be constructed in natural discourse, e.g., written in the style and vocabulary of the learner's language. So cultural stories with familiar content and stories from the learner's experiences are primary choices. Translated stories can also be used as long as there is great care taken to translate foreign discourses into clear, accurate, natural and meaningful texts of the target language. Keen learner interest in the topics should also be demonstrated.

The question often arises: Should these stories have a lot of predictable repetition built into them to help students learn to recognize words? Certainly the extra exposure to repeated parts does not hurt (unless they make the story become monotonous and therefore boring). There is general agreement that 'forced' repetition is unnecessary. Most languages have a natural repetition or rhythm already which makes reading by prediction easy with some practice.

Reading entire stories, at a normal speech rate and in an interesting way, builds fluency and contextual prediction skills into the minds of the learners. Enhancement then follows: discuss the story; ask questions; look

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closely at key words or important sentences; dramatize the story; draw out the meaning! Reading whole stories shows that reading is meaningful and can even be fun.

Another excellent learning activity to do is to create a story as a group. The teacher writes the story down and then the group learns to read it together. This type of activity is often called the Language Experience Approach (LEA) and can be a good bridge into T-D writing (Holdaway 1979).

3. CREATIVE WRITING[1]

While LEA encourages creative writing on a group basis, individuals are encouraged to become creative on their own. The learner is asked to create and write a story on a certain topic that he[2] knows, or to write a story from personal experience. No attention needs to be given at this point to technicalities below the word level such as spelling or punctuation. The entire focus is on the story line as a whole. Inventive spelling can and should be encouraged. However, if adult learners have a preconceived idea that only *correct* spelling is proper, and this blocks them from writing creatively, they can copy a correctly spelled word in order to continue with writing their story. The objective is to stimulate creativity and imagination in the learner and to teach him to express it with a writing instrument (chalk, pencil, crayon, stick, charcoal, etc.)

CAUTION: The teacher must be careful as to when he introduces the element of Creative Writing. Asking students to write creatively (without copying and without getting too technical) can be a bit tricky with some students. The best context to precede Creative Writing is a context of

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[1] It should be noted that 'Creative Writing' as used in this article is distinguished from 'Process Writing'. The two are defined as follows: **Creative Writing**: the learner expresses a thought or story in writing as best he can in a way meaningful to himself using personal creativity, illustrations and inventive spelling. **Process Writing**: a process beginning with creative writing as the first step, but then going on to involve the more technical aspects of polishing or 'perfecting' a story, editing and correcting mistakes, and possibly adding further text to the story line in discussion with the instructor (conferencing). Essentially process writing combines T-D and B-U writing strategies in a student- *and* teacher-driven way. It can be very effective especially in the more advanced stages of writing development.

[2] For the sake of simplicity, male gender pronouns are used here to refer in a generic way to both male and female.

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several whole stories where the focus goes no lower than word level. For example, if you ask students to write a creative story after a phonics lesson or after drilling syllables, it will be difficult for the student to jump all the way up to thinking creatively on the discourse level when the primary focus has just been below the word level. It seems that even the linguistic hierarchy is subject to gravity. A negative example may be profitable at this point.

Patti Brown, second grader, was writing very exciting, quite long, creative stories at the encouragement of her Whole Language teacher. (See Example A, Appendix) Then she switched to a teacher who focused strongly (and solely) on phonics and spelling. Patti's spelling and letter formation improved dramatically, but when her mom asked her to write a story for her, Patti balked. She said she couldn't. Mrs. Brown persisted, encouraging Patti to go ahead and try to write a story. After an agonizing half hour, Patti finally produced in beautiful handwriting a perfectly spelled but totally uncreative story. (See Example B, Appendix.) It's not that Patti was suddenly incapable of writing creatively, but the most recent strong focus on parts below the word level blocked her creative thinking at this point. The jump from the bottom to the top of the hierarchy was too much to make on her own.

4. WORD ATTACK

Balancing fluency and prediction skills with what most educators term 'word attack skills' is necessary. Reading is not always done in a meaningful context. Sometimes words occur in isolation and must be read. Even unknown words read in context need to be pronounced. This B-U element of the reading method is what enables the learner to read a new text completely on his own.

Preparing this element of a methodology usually requires some sort of systematic introduction (or control) of word parts. Drills are designed to help the learner instantly recognize these parts and put them together with other known parts to form new words or other meaningful chunks of text. Bottom-up strategies are strong in producing independent readers.

Word parts can be introduced as syllables or as letters or sounds (linguistically speaking: phonemes, thus the reading method, phonics). This is where the A-B-C's are learned if indeed they are explicitly taught.

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Morphemes (grammatically meaningful word parts[3]) are more complicated, rendering them less useful as word builders.

When working on the word attack element in a reading method, we must realize that spending too much time below the meaningful word level is similar to holding your breath under water—for many learners it can be fascinating, but tolerated only so long! Different people have different toleration levels. Timing is crucial—it is the difference between fun and pain. It is best to start with meaning, break down to non-meaningful parts for a time in order to learn building blocks, and then build back up to a meaningful level.

5. SPELLING

The B-U writing element focuses on students becoming skilled in accurate and consistent represention of the language in symbolic form. This includes proper letter formation and standard spelling. Of course, spelling can effectively enhance word attack skills because it encourages the learner to participate even more actively with the building blocks of meaning. Engaging the sense of touch/movement and seeing written material in another environment (created by the learner's own hand!) alongside hearing, serves to increase the memory's capabilities. It is to be hoped that the desire for 'proper' reading and writing is satisfied.

This element is most usually directed and initiated—especially in the earlier stages—by the teacher. Dictation is a common channel to use, often reinforced with positive examples or demonstrations. Immediate feedback

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[3] Examples of morphemes: a plural marker such as the 's' in 'dog*s*', a negation marker such as the 'un' in '*un*predictable' or 'non' as in '*non*sense', adjective markers such as the 'ive' in 'product*ive*' or the 'lic' in 'metal*lic*', a noun marker such as 'ed' in 'seat*ed*'. Many languages have verbs, for example, which are made up of a string of morphemes (e.g. location, tense, number, gender, and time) tied to a root which is also a morpheme. Morphemes can be on any level from a letter to a word and often change in form depending of the context. Being inconsistent, they are often considered too difficult a part to focus on, but some brave (and smart!) souls have successfully used a morphophonemic strategy to standardize spelling and unify dialectical differences in the literacy game. This is typically done by spelling certain morphemes one way in spite of various pronunciations (i.e., *sign* and *sign*ature, *photo* and *photo*graphy, *missionary* as pronounced differently in British and American dialects).

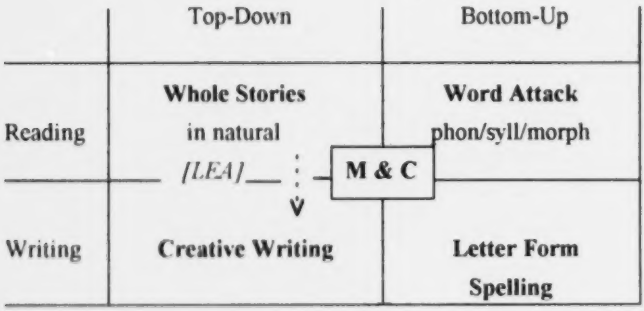
through correction and encouragement is crucial to rapid leaning without undue confusion.

6. INTERACTION

All these elements, when structured into a methodology, interact to varying degrees in different ways. However, some researchers[4] caution us to not mix T-D reading with B-U reading until individual students are cognitively prepared to do it naturally themselves. Their reasoning is that the two strategies are very different. To determine words and their meanings, T-D strategies use context and prediction, i.e., looking **outside** the word at its enviroment. However, in B-U strategies, words are determined through a phonetic approach, i.e., looking **within** the word at its components. The shifting between stategies can slow down the learning process for the beginning reader and confuse him. However, once individual strategies are learned, students can then use whichever strategy is appropriate to the situation (he could even use both).

Many other factors come into play in determining just how structured or free your delivery system can be. The major factors include: the teacher, teacher training, available materials, economics, expectations, felt needs, time, teacher-student ratio, allocation, and ongoingness, etc.

So, the fleshed-out model looks like this:



[4] The separation of strategies until individual students are ready to combine them themselves is a major principle of the Multi-Strategy Method, developed by researcher Mary Stringer (Stringer and Faraclas 1987).

Top-Down methodologies	**Bottom-up methodologies**
• learn by 'pretending'	'proper' reading and writing
• student-driven	teacher/text-driven
• natural texts	controlled texts
• sight words	built words
• group reading (Big Books)	independent reading
• NIM and Sustained Silent Reading	drills and dictation
Results of T-D Method	**Results of B-U Method**
• motivational	traditional expectations satisfied
• contextual prediction	'sounding out'
• functional-educational	correct pronunciation
• fluency	accuracy

Other development items that can be built in

- listening and comprehension
- question-answer, discussion, and sharing
- talking, describing, and expressing
- thinking and imagining
- drama and experiencing
- handling books, paper and pencil

7. PREPARATION ELEMENTS

Prereading traditionally has to do with visual, aural, and oral discrimination, i.e., preparing the eyes, ears and tongue for distinguishing finer details. It is often called reading readiness. Developing tactile (hand) skills such as how to handle books, paper and pencil can also be involved.

Some literacy workers are no doubt asking the question, "So where is the prereading and prewriting in this model?" The answer is two-fold.

Firstly, on the T-D side, reading and writing readiness skills are developed as you go, without the learner realizing it. With T-D strategies,

reading readiness is implied—you do it, but you do not necessarily see it specifically nor is it labeled as a separate stage. It is built in.

Secondly, on the B-U side, reading readiness is usually done as a very explicit and separate stage. This stage can involve activities such as matching pictures, letters, words that are the same or different (visual discrimination); listening for and learning to hear sounds in a given context (aural discrimination); learning to focus on and say specific language sounds in many different environments (oral discrimination). Bottom-up writing can also have a preparatory stage. This might involve learning how to properly hold a writing tool while training the hand to move freely and quickly in many contrasting ways (i.e. short lines, diagonal lines, circles, curved lines, and dots). It seems these particular activities are especially needed for very young children (2–6 years), for the elderly, or for those not used to small hand work involving fine motor skills. People of many pre-literate societies fall into this category and could profit greatly from some form of pre-writing.[5] For example, a fifty-year-old village woman in PNG who had farmed her whole life, found it very difficult and time consuming to pull a piece of chalk across a slate in a short straight line. She needed ten or more weeks of prewriting before tackling her ABC's. Less extreme cases would function well with two to five weeks of readiness work.

The model could have an optional preparatory section attached as shown in the chart on page sixteen.

[5] Des Oatridge (1980) developed a very useful prewriting system which many literacy programs have incorporated. His system involves writing slates full of contrasting patterns (lines and letters) slowly at first, and then with speed.

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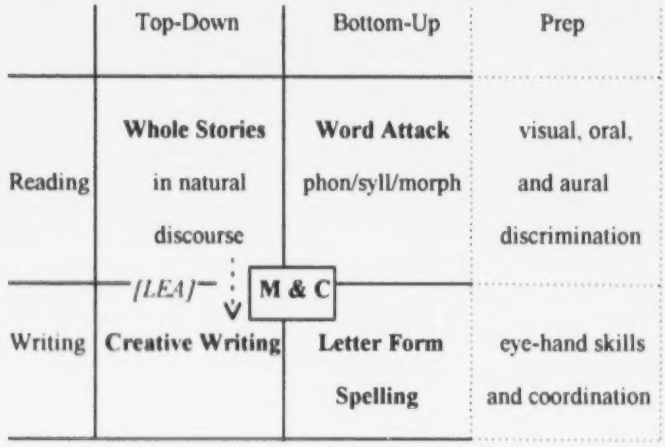

8. THE MODEL AS A TOOL

Analyzing and Evaluating

With this model in mind, one can quite easily analyze or evaluate a reading method currently being used or considered. Is it balanced? Are the four basic elements covered on each teaching day and given a solid time block? If the method seems weak in one area, one should consider ways to strengthen it without discarding it or totally disrupting its structure. To strengthen the weak areas of a method is to produce functionally fit literates.

Occasionally circumstances will require that part(s) of this model be sacrificed. For example, in a very remote area where people are exceptionally eager to learn to read, but where chalkboards, chalk, paper and pencils cannot feasibly be obtained on a regular basis, the entire writing portion of the model may need to be dropped. Perhaps the writing sections will be limited to creative alternatives such as using bush resources (i.e., writing on the ground with a stick or using charcoal to mark on tree bark pieces). Limited alternatives are much better than doing nothing at all in any of the four areas!

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Create Your Own Method

Some tools weigh and measure. Some tools give assistance in building. This model can do both. Given the factors of your situation, maybe you would like to put together a unique combination of learning activities that fall within the four basic guidelines presented by this model.

Keep in mind though, that the method chosen or created needs to reflect not only a balanced theoretical foundation, but also the other major factors already mentioned.[6] If the teachers are frustrated with or confused by the method, it needs adjusting. If the economic realities of your situation cannot handle the method, re-evaluation and changes are in order.

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[6] See "Interaction" section of this article.

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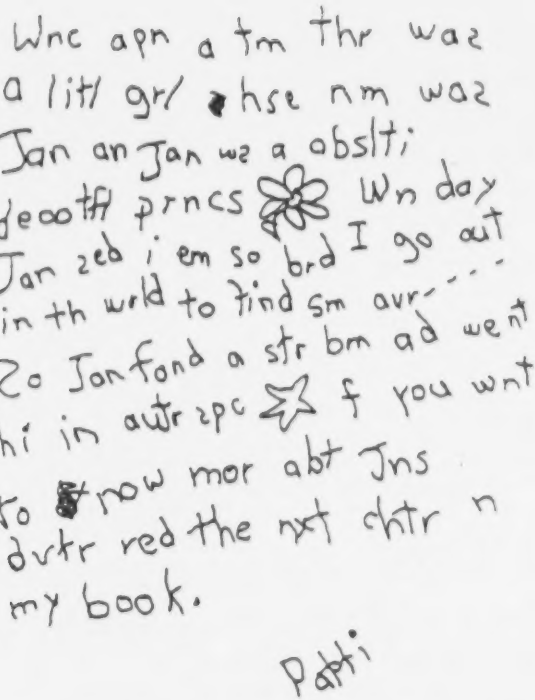
APPENDIX

Example A


Wnc apn a tm thr waz
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deootfl prncs Wn day
Jan zed i em so brd I go out
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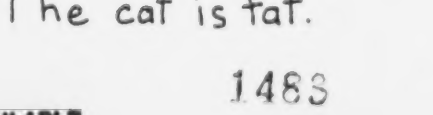
So Jan fond a str bm ad went
hi in outr zpc f you wnt
to know mor abt Jns
dvtr red the nxt chtr n
my book.
Patti

Translation to Example A: Once upon a time, there was a little girl whose name was Jan. And Jan was an absolutely beautiful princess! One day, Jan said, "I am so bored, I'm going out in the world to find some adventure...So Jan found a star beam and went high in outer space. If you want to know more about Jan's adventure, read the next chapter in my book.

Patti

Example B



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HANG FIVE: FIVE ATTITUDE SHIFTS THAT CAN MAKE TRAINER TRAINING WORK

Russ Cooper, Papua New Guinea

Russ Cooper and his wife, Mary, work in Papua New Guinea as linguists and translators researching the Buhutu language. Russ is a linguistics consultant and has been technical affairs administrator for the PNG branch of the Summer Institute of Linguistics (SIL).

"If, with a two hour investment of time, I can help a Mother Tongue Translator or Literacy Worker to achieve a higher level of skilled production in a vernacular program than I myself would achieve, why don't I do so?" (Hang Five, below)

1. SOME HANG-UPS

Some interesting developments have been taking place in the Papua New Guinea (PNG) literacy scene. As recently as 1988, most of us operated within a standard, expatriate-oriented paradigm, following the Gudshinsky Method and other similar traditions.

Now a training paradigm shift is taking place with the convergence of several seemingly unrelated developments. These developments are as follows: the Multi-Strategy Approach, the evolution of Shell Books, several successful programs using Big Books and other Whole Language strategies, plus a 180-degree policy shift on the part of the National Department of Education (NDOE) in Papua New Guinea.[1]

The ideologies behind some of these approaches have not, on the surface, been entirely compatible and there has been a 'more or less' scholarly controversy going on between the proponents of the various

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[1] I quote Keith Stebbins, Principle Curriculum Development Officer in Language and Literacy for the NDOE: "The present time is extremely vital for continuing RTU [SIL's Shell Book Research and Training Unit] involvement *as the National Government adopts the vernacular languages as the first language to be taught in the schools*, [italics mine] and as it tackles Papua New Guinea's serious adult literacy levels which are among the worse [*sic*] in the world" (1991).

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positions. It appears to this observer that this is evidence that some significant paradigm (as well as attitudinal) shifts are taking place which point ultimately in the direction of turnover of literacy training programs to our PNG colleagues on all levels.

With the changing national policy in 1989, vernacular preparatory schools, vernacular bridging components and other local language curricula may now become a valid part of any community's educational program. Various national and provincial government agencies have taken training programs into the provinces with multi-strategy and bridging component courses. Primary teacher's college curricula are also being developed to train future community school teachers in literacy techniques.

It is not that training has been neglected in the past. In a 1989 tabulation of village-level training programs over a twelve-month period, SIL teams in PNG trained 7,000 persons for a total of 60,000 contact hours.[2]

Unfortunately, almost none of this training involves true ongoingness *for the country as a whole*. We have some excellent programs in which there are local supervisors and *intra*-language trainers. However, with a handful of exceptions, we have not yet become seriously committed to training trainers on the ultimate level (i.e., the training of trainers of trainers) thereby working ourselves out of the *inter*-language training and consulting job.

This lack of adequate training is not due to a lack of desire so much as a falling short of an ideal, a lack of knowledge or focus, or, perhaps on the part of some individuals, a bit of subconscious western chauvinism. This chauvinism is betrayed by such attitudinal positions as: "Our people are not

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[2] This figure of 7,000 included persons in all areas of core activity: literacy, translation, linguistics, and community development, but did NOT include teaching people to read and write.

Looking at a different set of training statistics, in 1990, with approximately fifty SIL teams reporting, over 10,000 Papua New Guineans were taught in SIL related programs. Most of this training was concentrated at Stage 1: teaching people to read and write, and at Stage 2: training teachers, supervisors, and program and/or materials design at the local language level. Approximately 1,600 people were involved in training in materials design and as teachers and supervisors. The problem is that within SIL and Bible Translation Association of Papua New Guinea (BTA) contexts, only a handful of exceptional individuals has been brought to Stage 3—the training of trainers of trainers.

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quite ready for this yet." Or, "These people's learning styles are so different from ours...Papua New Guineans don't think the way we do. They learn everything by rote." "Local people can learn to teach a class, etc., but organizationally, the program falls apart when the expatriate is not there." Or even, "Third world people just don't have the drive that it takes to organize things on this level." In short, we have hedged ourselves about with rationalizations, because we have not set up 'do-able' programs for this last crucial stage in our training model.

2. LEARNING TO *HANG FIVE*

To borrow an analogy from the world of surfing, we can continue to splash around along the shore, taking an occasional tumble as we get knocked about by the breaking waves, or we can seriously learn the art of using a surfboard, get out where the big waves are and stand up to catch the wave. It is only after we learn *to hang ten*[3] and ride the board safely standing erect, that we can do the fancy stuff—learn to hang five so to speak. The time has come in PNG for us to do real training of trainers of trainers, not to continue splashing along the shore

Now, let us look at five principles that are emerging from the PNG scene.

1. Work backward from a set of turnover goals.
2. Teach principles not just methods.
3. Release creativity.
4. Make it do-able on the village level.
5. Release people to do what they know, then train from there.

Hang 1: Work backwards from turn over objectives

A simple principle, often overlooked, but which is emerging from our provincial literacy programs and our commitment to the National Department of Education (NDOE) is this: *In order to turn over any particular program to our mother tongue colleagues, we must work backward from target goals and target dates.*

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[3] As I understand the analogy, *to hang ten* means that one can safely maneuver the board standing erect on one's two feet. To *hang five* means that one is sufficiently skilled to control the board standing on one foot only. This would be a bit analogous to the bicycle rider who can say, "Look mom, no hands!"

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Steve Simpson, PNG literacy coordinator in 1991, was a former high school teacher with experience in developing experimental curricula in open classroom settings in Canada. He and his wife, Vicki, were seconded to the Provincial Government of East New Britain for over four years, and worked with provincial level specialists who in turn became their supervisors.[4]

In 1991 Steve worked with two other SIL consultants in cooperation with the NDOE in developing the vernacular component training package for the country.

Previously, in 1990, a pilot workshop was held, with key participation by BTA and other mother tongue (MT) literacy trainees including Sineina Gela, our BTA director's wife. Four of these MT colleagues and I helped plan, prepare materials for, and present the Big Book module for that workshop under the tutelage of Yasuko Nagai. These MT colleagues also took part in the post-workshop staff evaluation and planning session.

In the 1991 workshop, these trained participants were to play a larger role, and others were to be mentored as well. The ideal situation would be that a MT literacy specialist would be understudying as Assistant Vernacular Component Workshop Coordinator in 1992, and in 1993 would himself or herself coordinate a similar workshop out in a region with a more experienced consultant along as a mentor and helper.

Because continuity is so difficult to achieve over a four- or five-year period, it is important that several trainees, not just one, be mentored in each four-year cycle, and that new people be involved at entry level every year.

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[4] See the SIL video, *The Door is Open* (SIL Media, 1991), which features the Simpson's in this leadership mentoring role and the Mecklenbergs in a similar role with a more traditional intra-language mentoring situation.

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We *can* succeed in turning over[5] our programs to our MT colleagues:

1. if our training goals are modular and specific rather than vague and general;

2. if the mother tongue literacy trainees are mentored, from the beginning with a turnover date in mind;

3. if the MT literacy worker is involved in the total training process of workshop design and philosophy;

4. if the MT literacy worker can develop skills and up-front exposure in teaching at least some key components of the training module which the group is planning to transfer to local leadership;

5. and, lastly, but not least, if our training base is broad and iterating.

I would refer you to a paper of my own, *A People-Based Program* (Cooper, 1988) in which I describe how a very broadly based training program has evolved in the Buhutu translation project.

By *broadly based*, in our own case, we mean over 200 local participants who have done translation and literacy, working in small groups from community to community.

By *iteratively applied* we mean that a core of people is selected from the broader group who are trained to a higher level of expertise. These people then help lead small groups and train others at the lower level, from which pool others are mentored, and so on at each stage, until we have a cadre of 'expert' trainers. Since most of our leaders have *not* had secondary training, let alone tertiary, the iterating process takes a bit longer than when you start with university graduates—but the principle is the same.

Hang 2: Teach principles, not just methods

Teaching from a set of pedagogical principles, rather than by rote from an often complex syllabus, is a second key to making turnover possible. A

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[5] *Turn over* is in itself a stopgap term. The ultimate goal is not turning over of programs, but of people working together to develop programs. This is a true synergistic model, because it pulls together the best resources from all participants rather than assuming that the knowledge base is all on one side.

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corollary of this principle, is that the front-end of a literacy program design should also be based on a set of clearly focused heuristic principles, rather than on doing some arcane and highly complex, time delayed tasks.

Do not do the complex outsider tasks first. First do the things that local leaders can lead in, then help them absorb the more complex tasks as needed in a well-planned sequence.

This has been exemplified dramatically by people using the whole-language approach. Two examples in particular are noted: Daniel and Wei Lei Jesudason (1992) have built a whole program around simple Genesis stories, and Yasuko Nagai (1990) and Glenys Waters (1992) have used Big Books with highly interesting, repetitive stories that often have animals as main characters.[6]

The Jesudasons have been able to train both new literates and also young people with only a few grades of primary school, as teachers and supervisors in a program that has quickly gotten out of their control in a positive sense. For example, they have come back into the language area from other assignments to find whole villages that have set up successful literacy classes in their absence!

Using Big Books, Yasuko Nagai has recently helped two related language groups in Milne Bay Province to establish their own vernacular preparatory school programs. The five principles she and other whole language proponents teach provide a framework *that liberates the teacher and the pupils to interact in an enjoyable context*, but yet allows for as much structuring as an individual topic or situation demands.

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[6] There have been a few PNG 'pioneers' using whole language methods. In particular, Peter Evans (Literacy Coordinator, 1991–92) and his wife, Bev, have been using a whole language approach for some years (P. Evans 1987 and B. Evans 1984).

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The principles modeled in this framework can be summarized in five points.[7]

1. Talk
2. Read
3. Talk
4. Read
5. Do

Basically, the teacher discusses the topic of the story with the pupils, then reads it aloud to them with natural expression, tracking the text with a pointer. The teacher then discusses the story picture by picture with the group, drawing out from them details of the story and any other comments they might have. They then read along with the teacher as the text is tracked. Lastly, the group is engaged in a learning activity that can range from a song or drama to a focused attention to recurring words or letter combinations.

Hang 3: Release creativity

Traditional western educational methods used in PNG have been highly oriented toward rote learning. Children often recite in unison in response to a teacher, and both creative expression and critical thinking are frequently lost.

SIL literacy programs often fall victim to the rote mentality. This is due in part to our limited training heuristics and also to the fact that our local literacy teachers will often revert back to a model under which they did their primary schooling, even if a more creative approach was modeled for them in their teacher's training courses and workshops.

Earlier models and the Big Book approach have tackled the issue of creative approaches to reading and the development of training materials, but in the Multi-Strategy approach, Mary Stringer and Nicholas Faraclas

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[7] By *teaching from a set of principles* we do not mean to focus on any particular model to the exclusion of another. For example, Sue Presnall, working in the Polynesian Atolls, has helped her teachers grasp a very different approach, a *quick phonics* model from which they can creatively interact with their pupils. The point to be made here is that teachers who teach from understanding can creatively interact with the needs of their students, but teachers who are locked into a complicated set of steps in a detailed syllabus sometimes do not learn to adapt to the needs of their pupils.

have rightly perceived *the creative process* as a core issue (Stringer and Faraclas 1987; Stringer 1992).

This framework emphasizes pupil and teacher creativity in the story track, and pupils are encouraged to express themselves in 'writing' even before they have learned letter-sound correspondences. Meanwhile, analytical skills are taught in the workbook track.

Hang 4: Make it do-able on the local level

There are two points subsumed under this principle. Some assumptions that tie in with this principle are also included.

1. The program should utilize appropriate technology for production of good quality material on the local level. Production becomes promotion when there is local ownership of a good product.

2. The production of materials, particularly reading to learn materials should be not only do-able but open ended. In order for literacy to be incorporated as a core value in a society, people need to be able to create 'a library in every language' (the people's own window to the world) not just a handful of primers and cultural readers.[8]

The Shell Research and Training Unit has in nine months enabled village production of over 30,000 small booklets in nearly 100 languages of

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[8] As I enumerate these principles and describe facets of the whole language, multi-strategy, and shell book methodologies, I am conscious of the fact that for some people the ideas that I juxtapose are felt to be mutually incompatible. I do not feel that this is the case.

In fact, what has been so exciting though tension-creating at times, has been this proliferation of models and approaches that signal a paradigm shift as old assumptions are being questioned. Such a shift now poses some real dangers. Much common sense knowledge and many tricks of the trade may get thrown out needlessly. We may become so polarized in our points of view that we cannot learn from one another, or we may stop listening to the senior members of our literacy team who have, after all, trained a host of readers under an older paradigm—*which does work*.

Papua New Guinea.[9] Most of these have been produced on a trial basis in editions of 50 or fewer copies. Many of them have been Bible Society booklets designed to come prior to the New Reader series.

As the number of titles increases and available types of shell books are tested in various formats and sizes, it is hoped that any language project in PNG may be able to select from the library to utilize titles that will be most appropriate to the needs of their program. These selections will not only form the base of a Reading to Learn library, but can in turn trigger local creativity when tied in with local writers workshops.[10]

The Shell Book concept is not designed to replace any literacy theory or approach or to replace locally authored materials, but is designed to *make do-able* the local production of Reading to Learn libraries at a cost that people can afford. The very fact that an outside book can be produced so easily highlights the need for contextualization on the part of any local group. Do we simply produce Bible story booklets, for example, or are they developed around the contexts of felt needs in the local culture—dealing with 'spirits of dead people', traditional beliefs about *mana* or power as well as simply retelling the biblical narratives?

A Shell Book can be laid out on a computer using desk top publishing techniques, or one may utilize pre-print picture shells into which vernacular text is then 'poured', or one may go back to pre-computer lay-out techniques. On the village end, silk-screen printers are used. Again the level of technology is a matter of choice. Stencils may be cut electronically or on a dot-matrix printer, typed by hand, or lettered with a stylus or used ball point pen.

What has been exciting about the marriage of high-tech with low-tech production techniques is that ordinary village people can buy the pre-print shells and take control of the whole production process. The quality of the silk-screened booklets is so good that village neighbors ask if the books were printed in Australia. Children come in the night with a few coins to buy their own copies because the books are nice, and besides, they were

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[9] Three months later, by September of 1991, this number had jumped to 70,000 shell books produced in PNG, and was over 300,000 in 150 languages by March 1992.

[10] In our own program I know this is the case, as people have been drawing illustrations for a number of their own stories that they want included in this library.

written and printed right in the village. Village owned *production* has become a powerful *promotional* motivation for the total literacy and translation effort. People read the materials because they look like (and in fact are!) real books. Because the books are read, they also are checked, and people take delight in pointing out typographical errors, or mistakes of substance—thus the orthography and translation checking process is also enhanced and a broader people-base is established for the program. It can become a powerful feeder to developing a pool of village translators as well as literacy workers.

Hang 5: Release people to do what they know, then train *together*

I personally have been specifically involved in training people how to maintain linguistic quality control in the translation process (Cooper 1990a, b, and 1991).

This concept has been refined by asking experienced mother tongue translators what they most needed to know, then checking their responses against what senior translation consultants have found to be crucial areas in the checking process. After teaching grammar courses for MT translators at three different levels, some of the participants then helped me set up a training model for MT literacy workers that we *together* tested in three different groups.

It is important to note that mother tongue speakers of vernacular languages in PNG who can use English or Tok Pisin as languages of wider communication already have considerable skill as oral translators. The rub comes when they try to translate a written text.

Most naive translators make similar mistakes: they translate literally; they distort the grammar, even at the sentence level and below; and on the discourse level the cohesion and connective devices are abused. Constructions become too heavy.

However, if: (1) MT translators are *given permission* to respect the structures of their own language; (2) they are shown the difference between *bruk-bruk tok* (i.e., 'disjointed discourse') and a text that is *clear, accurate and natural*; (3) they work from the top down, from the whole text or episode; (4) they work orally first, rather than translating sentence by sentence; (5) they are given permission to (re)move the 'heavy' material (such as repeated nouns where the vernacular would merely use a person marker on a verb), then, I have discovered that a two-hour work session is

adequate to MT translator can produce a clear, accurate, natural script in the receptor language.[11] The fact that the MT translator may need several years of training and mentoring still does not abrogate the fact that he or she is already further along than I would have been after years of language learning and study, coming in from the outside.

Very often in the past we have not done very well at conveying the skills needed by MT translators and MT literacy workers for their task because we have not bothered to find out what it was that they needed to know. We also have not worked very hard on the heuristics involved in doing a good job of teaching. Instead, we have taught MT translators and MT literacy workers *as if* they needed to know the same things that we *assumed* that we needed to know.

For the translation task, MT translators recognize that what they need is a grid for comparison of source and receptor language.[12] They need to be able to explicate the source language situation and have conscious control over the devices in their own language that can encode the equivalent in their mother tongues. They do not, however, need to memorize paradigms, or get lost in a morass of morphological rules, because these are already internalized. An expatriate language worker to some extent must begin working from the bottom up in his analysis. A MT translator can work top down from pragmatic situations and semantic functions, and if his heuristic has built into it a hypothetico-deductive cycle he can learn to tap into his "native speaker intuitions" (to borrow a key concept from Chomsky 1957).

3. LET'S LEARN TO TRAIN TOGETHER—OR HANG IT UP!

If in SIL Branches, our literacy consultants can rise above their individual approaches and biases; learn to compare and evaluate what each has to offer in a framework of careful academic research; live with change in the midst of paradigm shift; and seriously commit our resources to

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[11] With the help of several BTA colleagues, I have personally verified this claim, working with speakers of more than forty PNG languages, none of whom had had prior experience as translators.

[12] This has come from interview and evaluation sessions prior to the 1990 National Translator Course and during the 1991 course. For example, advanced-level trainees said that what they specifically needed was a way to get at how aspect and modal systems in the source languages compared with their own. Passives and topicalizers also need similar attention.

implementing the five principles I have discussed above, I think we are on the road to true *ongoingness*.

However, our MT colleagues must be allowed to own their own local programs, their own means of production, as well as their own academic models. We must learn to train together, paying serious heed to one another's world views. We must take seriously the immense resources that can be accessed in any local community, if we draw these out rather than superimpose an outside agenda.

If we stop short of equipping people all the way to the top of the educational ladder, we have missed one of the greatest opportunities of the century, because PNG and much of the rest of the planet are ready now.[13]

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[13] At the opening of the National Department of Education Shell Production Room on October 17, 1991, Minister for Education, Mr. Utula Samana, said, "Papua New Guinea has real challenges to tackle in the production of 870 alphabets, 870 sets of pre-readers, 870 sets of adult literacy readers, and a library of approximately 2,000 illustrated shell book titles that can be translated quickly and easily into any of the Papua New Guinean languages. This is our goal. This is our dream. This is our vision."

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READING THEORIES AND METHODS AND THEIR RELATIONSHIP TO COGNITIVE AND CULTURAL LEARNING STYLES

Yasuko Nagai, Papua New Guinea

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Outline

1. Introduction
2. Reading Theories
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   - 2.2 Top-down theories
3. Reading Methods
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   - 3.3 Top-down method with emphasis on phonics: Interactive whole language method
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5. Developing an Indigenous Reading Method
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1. INTRODUCTION

Two modes of cognitive learning styles, linear and holistic, are addressed in bottom-up and top-down approaches within reading theory and methods. Bottom-up models teach parts of the language first and build up to the meaningful whole. Top-down models begin teaching from a meaningful whole and teach parts of the language in a meaningful whole context. There has been a long-standing debate in the field of education as to which approach should be used.

When implementing these approaches, we must consider cultural learning styles in teaching students as well as training the teachers. In Papua New Guinea, the social status and educational status were often considered in relation to a Western standard and did not take into account the cultural learning styles of the people. In contrast, in Australia, we paid significant attention to Aboriginal learning styles when we debated the designing of culturally appropriate reading methods.

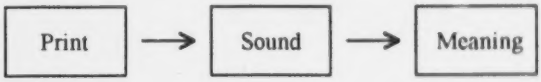
In this article I will discuss theories and methods in the above two approaches in relation to cognitive and cultural learning styles. Then I will examine two reading methods designed by expatriates. Finally I will discuss how an indigenous reading method was developed that was appropriate to the cognitive and cultural learning styles of a particular group of people.

2. READING THEORIES

2.1 Bottom-Up Theories

Bottom-up theories of reading are based on the belief that a reader must know the sounds of the written code when he sees them. Therefore the first task of reading is to learn the alphabetic codes and their sounds. When the reader has mastered the relationship between the alphabetic codes and their sounds, they should be able to decode the written text, and the meaning of it is expected to come naturally. Bloomfield (1961:10) says that "one must have an ingrained habit of producing the phonemes of one's language when one sees the written...phonemes."

Figure 1. Decoding for meaning



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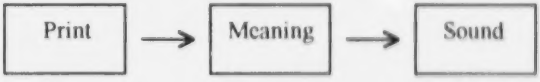
2.2 Top-Down Theories

Top-down theories of reading rely on the assumption that understanding of the meaning of the written text comes first and the sound of the text comes later. In other words readers read for meaning without worrying about how to pronounce each letter or word. Smith (1975:184) says that "written language must be directly attacked for meaning." Even though some print may be unfamiliar to the reader, meaning is brought to print through the non-visual information (information other than visual information from the print) that has been already stored in the brain of the reader. This is explained well in the reading-like behavior when beginning readers 'read' the repetitive phrases by prediction.[1]

Figure 4. Reading for Meaning



3. READING METHODS

3.1 Bottom-Up Method: Phonics

Phonics is a method of teaching the relationship between sounds and letters. From the bottom-up point of view, it teaches how to sound out words. Its primary focus is on letters and how these letters are blended into words. In other words it teaches a decoding skill.

The most critical factor underlying fluent reading is the ability to recognize letters, spelling patterns, and whole words effortlessly, automatically, and visually. The central goal of all reading instruction–comprehension–depends critically on this ability (Adams 1991:54).

Phonics is a method of teaching word attack skills. The meaning of the whole context is not in focus, but phonics hopes that the reader can make sense out of the sentence when he finishes decoding all the words in it.

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[1] See Appendix A, figures 2 and 3 for examples of stories in which a reader can predict a phrase because gained in the previous pages.

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Teaching phonics is based on an analytical and linear mode of thinking. Language is fragmented into small pieces and each small piece is taught separately. Lessons are already planned for the teachers to follow step by step, and such lessons often provide exactly what the teacher is supposed to say. So the teacher is an authority who passes on his knowledge step by step and learners learn accordingly. It is a teacher-centered formal approach. People who learn things informally in a meaningful context find it difficult to understand the reason and the purpose of such a learning process.

3.2 Top-Down Method: Whole Language

The method of whole language is to teach reading and writing in a meaningful context. The Whole Language Method provides a learner with "a learning environment in which he will be free to act and to develop himself along the lines of his own inner direction" (Hainstock 1968:9). It is a method of teaching reading by reading. Parts of the language are not in primary focus, but are taught from a meaningful whole context. In this method, phonics is taught rather incidentally. *Meaningful context* means that the story is not restricted to a contrived set of sounds in focus, but flows naturally, and the theme of the story is relevant to the reader. In this method, although the students are in control of their learning, the teacher is in control of the *planned-informal*[2] frame of the lesson. Students are encouraged to experiment in reading and writing. It is a learner-centered, literature-based method. Although informal learning styles require things to happen naturally and incidentally, the planned-informal lessons are designed carefully and facilitated by the teacher. As the whole language method is based on a holistic, global mode of thinking, language is not fragmented into small pieces but kept as a meaningful whole. It appeals to people who learn by observation and imitation using trial and error in a meaningful context.

3.3 Top-Down Method with Emphasis on Phonics: Interactive Whole Language Method

Teaching decoding skills will produce readers but not many writers. Teaching encoding skills will produce both writers and readers. The Interactive Whole Language Method is a whole language method with systematic teaching of phonics to gain encoding skills.

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[2] See Appendix B.

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Phonics from the top-down point of view is the tool of the writer. It teaches the learner to identify similarities and differences of sounds at different positions in different words. It helps a learner spell the letters in the same sequence as the sounds in his speech. In other words it teaches an encoding skill. This encoding skill helps a learner read (decode) what is written. It is a way of learning to read by writing.

The Interactive Whole Language Method's primary purpose is to teach reading and writing for meaning. While the learners are allowed to experiment in reading and writing, they are also taught how to put their speech into writing. So an analytical linear mode of thinking is taught within a holistic global method. Since phonics is taught from a meaningful context and the learner has an immediate opportunity to apply and experiment with his skills meaningfully, it makes sense to the people who learn things most easily in a meaningful context.

4. A CRITIQUE ON TWO LITERACY METHODS

The following two literacy methods were designed by Christian missionaries. The first one is the Gudschinsky Method which has been widely advocated and used extensively in many countries. The second one is the Multi-Strategy Method which was designed in Papua New Guinea and has recently spread to a number of areas of that country. My critique on these methods is not based on how well the people learned literacy skills but their suitability to the cognitive and cultural learning styles of those who are meant to learn by them.

4.1 The Gudschinsky Method

The Gudschinsky Method was developed in the Americas during the 1960s. Gudschinsky (1973:25) stated that her method was one "of analysis rather than synthesis." Thus the Gudschinsky Method is a method based on left-mode thought processes. This explains why the Gudschinsky Method of learning to read did not make sense to the Aboriginal people—the majority of whom use a right-mode of thinking much more than a left-mode of thinking.

The Gudschinsky Method begins with analysis of a key word and breaks it down into syllables and then uses synthesis to build these syllables up to a word again. This synthesis activity is most often done with a word that is a fragment of a whole meaningful context. Since Aboriginal people learn by

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wholes rather than by parts, they could not understand why they had to read just a single word or a part of a word in isolation.

In the Gudschinsky Method, syllables are not broken into phonemes (i.e., letter symbols suited to the language). Gudschinsky believed that phonemes (especially consonants) are difficult to isolate and it would be boring and discouraging if a learner had to master single letters first. She held that the mastering of syllables more quickly resulted in being able to build up into words. Gudschinsky also believed that it is hard to focus on a unit larger than a word. However, Harris says, "In the teaching of reading, if traditional Aboriginal children tend to have a highly developed visual memory..., then it might be safe to expose them to a larger-than-normal volume of sight words while they are learning to read" (1977:84).

Gudschinsky (1975:26) said, "Pupils will remember a long word or phrase by focusing on one bit of it and will recall the whole thing by that one bit." This linear mode of analyzing a word or sentence is true in the Gudschinsky Method. However, a holistic person perceives each object as a unique entity not by analysis but by observation of its whole. The Gudschinsky Method requires early 'simple' sentences built with a limited number of syllables. As a result the sentences are often unnatural. It is hard to remember sentences that are isolated from a meaningful context and are often irrelevant. My Aboriginal friends could not read such 'simple' sentences.

The Gudschinsky method has five kinds of syllable drills: analysis, synthesis, identification, contrast, and word building.[3] Although Aboriginal people are good at identifying things in relation to other things and how parts go together to form a whole, they do not learn identification skills by comparing the small parts with each other but by seeing each item individually as a unique entity in relation to other whole entities. Aboriginal people learn the difference between each item by observation—they just look and keep on looking. How the differentiation is made is up to the learner. When they explain how one differs from the other it is always in relation to the whole.[4] So the activities on identifying and comparing syllables in isolation from the whole did not make sense to them.

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[3] See the sample lessons in the Appendix A, figures 5 and 6.

[4] My Aboriginal "cousin" Bella had many children, at least twelve or thirteen. When I asked her how many children she had, she started naming each one instead

The Gudschinsky Method is built on linear thinking. I have heard one literacy consultant comment that this method was simple and suitable for less educated people. However, 'linear simplicity' is not 'simple' for holistic thinking people. 'Holistic simplicity' begins with a meaningful story that often has many sentences, and generally uses all the phonemes of the language. Because it is predictable as well as meaningful and enjoyable, the learner has little difficulty in remembering it. Memory is a tool for reading, although the learners are not asked to remember the story. However with its strong story line, such a story can be remembered by the learner automatically.[5]

In contrast, the Gudschinsky Method begins with syllables and through the process of learning, the learner "becomes aware that he is on his way to reading something that makes sense" (Gudschinsky 1973:25). Since Aboriginal people learn things in a meaningful real-life context and do not build up their skills in an isolated irrelevant context, they could not comprehend how their mastery of syllables and words would lead them to become fluent readers.

This linear method is not only hard for the holistic people to learn but also for the holistic people to teach. Whenever we teach, it needs to make sense to us. People are not puppets. Each person is capable of thinking regardless of his cultural background. It is important for us to remember that a difference in cognitive learning styles is not a measure of intelligence.

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of counting them. When she finished naming them, she asked me how many they were. As I did not know some of them, I asked her how individuals looked, i.e., to identify what distinguishing features they had. She explained to me not how they looked in comparison with others, but how each child related to the whole society through their kinship system.

[5] Memory helps a learner with his comprehension of the text. The sequencing activity is one of the ways to test his comprehension. One sequencing activity uses small picture cards (sequencing cards) that have the same the pictures on them as the pictures in the Big Book. During a sequencing activity at Labe Preparatory School in Milne Bay Province, I was amazed to observe an 8-year-old child recite the whole story exactly as it was written in the Big Book story while she put the sequencing cards in the same order as in the Big Book. This occurred after she and the class watched the teacher read it once, and then the class read it together once. In this particular story it really did not matter which page came first as long as the last one was correct. This child put them in the exact same order as the big book. See the story "If I were a rooster..." in Appendix A, figure 2.

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4.2 The Multi-Strategy Method

The Multi-Strategy Method (M-SM) was developed in Papua New Guinea in the 1980s. Its aim is "to use as many strategies and approaches as possible" (Stringer and Faraclas 1987:12). It is divided into two tracks: the story track and the workbook track. The reason behind the division into two tracks was that the teachers who were trying to teach both simultaneously found it very difficult.[6] Therefore the method is not just divided into two tracks but appoints and trains a different teacher for each track. It is designed to suit everyone according to his cognitive learning styles: the story track for the holistic thinking people and the workbook track for the linear thinking people. It is based on the belief that the two modes of learning should not be mixed together.

M-SM was first begun as an attempt to put together the Gudschinsky Method and the Language Experience Approach (LEA).[7] The former is linear and the latter is holistic. These two methods are completely different and it is easy to understand why the local teachers said that it was too difficult to teach both. It is like water and oil. These two can be poured into one bottle, but will soon separate from each other. I agree with Stringer that "mixing the two learning modes is more difficult to teach and tends to cognitive confusion" (1992a, 1992b:13). 'Mixing' is not an ideal method of creating something new. Before concluding that there should be two separate tracks, however, there should have been a careful consideration of how the people think holistically as pertaining to the overall patterns and structures of the local culture. Sanders says, "If cross-cultural trainers do not consider what their trainees believe to be effective learning strategies, an unconscious conflict between the trainer and trainee may well arise" (1988:111). This explains why some Papua New Guinea preparatory school teachers said that this method was a 'white man's method'.

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[6] This was explained by Stringer (1992c) in one of the lectures on the Multi-Strategy Method during the Reading Method and Applied Linguistics course at SIL, November 1992.

[7] "The Language Experience Approach involves the teacher using stories dictated by the students that involve their own experiences. These stories are then used to create the reading material which the students will use." (Gunderson 1991:162).

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I agree with Stringer that the two modes of learning should not be mixed together. I disagree, however, that parts of the language have to be taught in isolation from the whole of the language and have to have two separate tracks. In the middle of reading a story for meaning and enjoyment, there is no sense in stopping the reader to pay attention to certain letters or words to teach parts of the language. After finishing reading for meaning, the teacher and learner can go back to a certain meaningful phrase (usually repetitive and with focus of attention on it in the story) and can learn a word and sounds in the phrase. In this way the learner understands that learning parts of the language is directly related to the whole of the language. It makes sense to the people who are global and holistic (Vollrath 1991:19). Learning of parts within a meaningful whole does not cause any confusion but rather makes sense to holistic people (Jesudason and Jesudason 1992:20–21).

Dividing teachers according to their preferred learning style is not the best answer to suit the teaching method. It is rather categorizing each person ignoring the fact that he uses both sides of his brain. A linear-thinking person uses more of left brain but does use right brain when it is necessary, and a holistic thinking person uses more of right brain but uses left brain when it is necessary. Japanese people use left and right brain simultaneously in reading.[8] The point is that a person cannot be divided into two, but both modes of the brain complement each other in thinking, reading, and various activities.

According to Stringer (1992b:12,18), "The Multi-Strategy Method fits traditional cultural learning styles." Her reason for having a workbook track is the existence of rote learning in the Papua New Guinean culture. Her view on 'rote' is that it has no relevance in real life. However, Harris, in referring to Aboriginal culture says that "rote learning is virtually always done in meaningful, observable context" (1977:268).

Stringer said that the M-SM was an integrated whole language method (1992c). However, whole language is not a collection of various methods but a whole containing many methods derived from the whole. Oil and water cannot be integrated. In the M-SM the holistic mode is built on LEA.

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[8] The Japanese language is written in the combination of Chinese characters (each of which has a meaning) and phonetic characters to join the Chinese characters to form a sentence.

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However, LEA does not represent all of whole language but is just one of the methods in it.

The literature built only on the learner's language experience has a limitation in quality, as the learner has never experienced any other story than his decoded speech. The quality of the literature in the Multi-Strategy Method needs to be examined and improved if it wants learners to understand what good literature is. There is a limitation in developing purely indigenous authored literature in an oral culture. How do they know what good literature is without being exposed to good literature?

Whole language is a literature-based approach. Without enough good literature this approach will be warped. In an oral culture where there is no literature, the people need to be shown what good literature is. Good literature has been defined as literature matched to the reader's age, comprehensible and logical according to the reader's schemata. It is related to the culture and its theme is familiar to the reader. It has a good story line with a beginning, a middle, and a good ending. Good literature is expressed naturally, has plenty of interesting dialogue, and draws out the emotions of the reader.

In the Papua New Guinean culture, for example, it may be more culturally appropriate to leave the moral of a story implicit than drawing it out.[9] Stories in the early stage should have lots of repetition.[10] Repetition is a basic tool for early stages of reading. There are repetitive stories in each culture. Having lots of repetition in the early stages of children's literature is almost universal around the world. From my own experience repetition is also helpful in teaching adults.

Presenting examples of good literature is the best way to encourage and stimulate local authors. Then they can imitate it. These stories can be

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[9] One of my colleagues said that when she added a conclusive phrase for a hymn in the language in which she was working, she was told by the people that it was not necessary in their culture. Everyone would know what was meant anyway, so it would be more natural to leave it implicit. There was another colleague who added an extra page of moral to a children's story and the people commented, "We don't say that!" Drawing a moral from the story and writing it may detract from the climax of the story.

[10] Compare these features of good literature with the sample stories from the M-SM in the Appendix A, figure 7. Note that there is no direct dialogue or repetition in those stories.

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shared with others within Papua New Guinea. They can be adapted and changed according to the different cultures in the country.

It is recommended that familiar stories[11] be used to begin teaching people to read. Learners can read a story that has been dictated by the learners, themselves, as in the Learning Experience Approach. However, to read ordinary everyday stories without any surprise or excitement in them can become boring (Borneman 1992:10). A good quality story is not measured by familiarity of the content of the story but familiarity of the theme and the concept of the story. It is an essential task for a cross-cultural facilitator to help people build up a good library of quality literature. The cross-cultural facilitator must also know what a good story is.

5. DEVELOPING AN INDIGENOUS READING METHOD

In mid-1990 I had a hypothesis that it would be possible to develop an indigenous community-based literacy program with a literacy method developed by the local people to which I could give assistance as a cross-cultural facilitator.

First, a request for assistance to develop a community-based literacy program came from the people of Maiwala community. The Maiwala people wanted to begin a vernacular preparatory school (prep school) to teach their children, and so my relationship with them began. I, as a consultant, never lived in their village, but I had a lot of contact with them. As a result of helping the people write and edit their stories I came to understand and appreciate their language. As I was traveling extensively as a consultant, I had only a short period of time with the Maiwala people on each visit. During my visits I stayed at the SIL center and each day I drove thirteen kilometers to the Maiwala Community.

As I saw their commitment to their prep school, I felt I should commit myself to them to give them assistance in developing the school curriculum and training teachers. I enjoyed a mutual relationship with those who wanted to be teachers. I respected them for their commitment to the unpaid job of teaching, and they respected me as an advisor. As I began my

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[11] Wendell (1982:24–27) describes four stages of "Easy-to-Difficult Reading Material": Stage 1: a content completely familiar to author and readers; Stage 2: new content, personally experienced by the author; Stage 3: new content, vicariously experienced by the author; Stage 4: new content, translated from another language by the author.

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interaction, I first introduced them to the Shared Book Experience[12] method with which they were delighted. They said that it was the way they learned things in the village.

They probably thought that I was going to give them a fully developed teaching method. They soon realized that they were fully involved in developing one themselves. I showed them, one at a time, the different methods within the whole language approach. They then worked on each one for a while to see if it would be beneficial and applicable to their school needs. There was also a Papua New Guinean literacy consultant who joined the Maiwala team in developing the method. He gave us valuable advice in designing phonics within the whole language approach. His holistic cultural learning style reinforced my hypothesis, and thus the Interactive Whole Language method came into being.

As a facilitator and consultant I gave them advice and kept a mutual relationship with them. From my own experience with the missionaries who came to Japan, I did not want to impose any teaching method on them, but shared with them what I could offer.

Mrs. Ronah Kiebu, a former primary school teacher from Maiwala Community with whom I worked on the Maiwala Preparatory School literacy program, said that she learned substantially more in the literacy program than she learned in her primary school teacher training. I have no way of comparing the quantity of training she had before, but I knew the training I gave them allowed them to practice what I introduced them to in their meaningful real-life context. They learned bit by bit by observation and imitation during each of my short visits, and put what they learned into practice through trial and error before my next visit. Because they wanted to be trained well, they continued learning by persistence and repetition. As each part of their learning was integrated into their whole language approach, it became meaningful to their teacher training.

This pattern of learning lasted over a period of two years. Some literacy personnel tend to train as many local people as quickly as possible to prove

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[12] The Shared Book Experience "involves incorporating repetitive materials (stories, songs, poems, or chants), which have a high predictability, a strong rhythm, and a strong story line, into the reading program. The main idea behind this strategy is the support it gives early readers. Because it is most often done utilizing an enlarged edition of a regular-sized book, this procedure has also become known as the **big book experience**" (Lukasevich 1991: 224–225).

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the effectiveness of their methods. However, my focus was not on quantity but on quality.

The ownership of the prep school program was the community's from the beginning, and they proved how much they could do as a group. Although there were many trials and tribulations, it has become a successful program. As a literacy consultant and trainer, I was able to keep my perspective wide open to see and hear what the Maiwala teachers had to offer, as well as receiving the advice of my colleagues. I could have been in danger of falling into a common trap. Chall says, "Personal investment in a particular reading program can destroy perspective and make one see what one wants to see, rather than what is actually there" (1967:269). Fortunately for me that wasn't the case. The Maiwala experience proved to be a learning process that designed a special key to fit a specific keyhole.

6. SUMMARY

I have briefly discussed two reading theories and methods, and compared them with cognitive learning styles for their effectiveness in a cross-cultural situation. The method of whole language suits the communities whose majority is holistic. A cross-cultural facilitator needs to know his own cognitive learning style before learning about the style of others. It is also essential to first know one's own character and temperament types[13] before thinking from another's point of view. It is also helpful to know one's own cultural learning styles in order to understand how other people across the cultural boundary learn when introducing to them something foreign such as literacy. Understanding both his own and other's cultural learning styles is an essential tool in adapting and developing something foreign into a form suitable for the local people.

I have also written critiques on two literacy methods that were designed for preliterate and semiliterate societies by expatriate SIL members, Sarah Gudschinsky and Mary Stringer. My critiques were mainly based on my experience with the cultural learning styles of the Australian Aborigines and the people in Papua New Guinea. It was not my intention to see how well people learned from these methods, but to see whether these methods were built on the learning styles of the people. Finally, I briefly discussed

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[13] Different character and temperament types according to the Keirsey Temperament Sorter are described in *Please Understand Me* by David Keirsey and Marilyn Bates (1984).

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how I facilitated in developing a community-based literacy program and a community based literacy method.

It is essential for us to know how people think and how they learn when we teach them to read. Whatever the method designed, it must make sense, and it is vital that it is culturally logical to the people with whom the designer tries to communicate and to teach. However, there is a danger of an outsider designing one method and assuming that it should work well in other cultures. Each culture is unique, although some share similar features. It will be helpful for the literacy worker to know the similarities and differences between their own learning styles and those of another in order to design a method. Moreover, the process of designing a method should be a collaborative work between the literacy worker and the local people. This interaction should be bidirectional through mutual relationship.

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APPENDICES

Appendix A

Figure 2. Sample repetitive story (1)

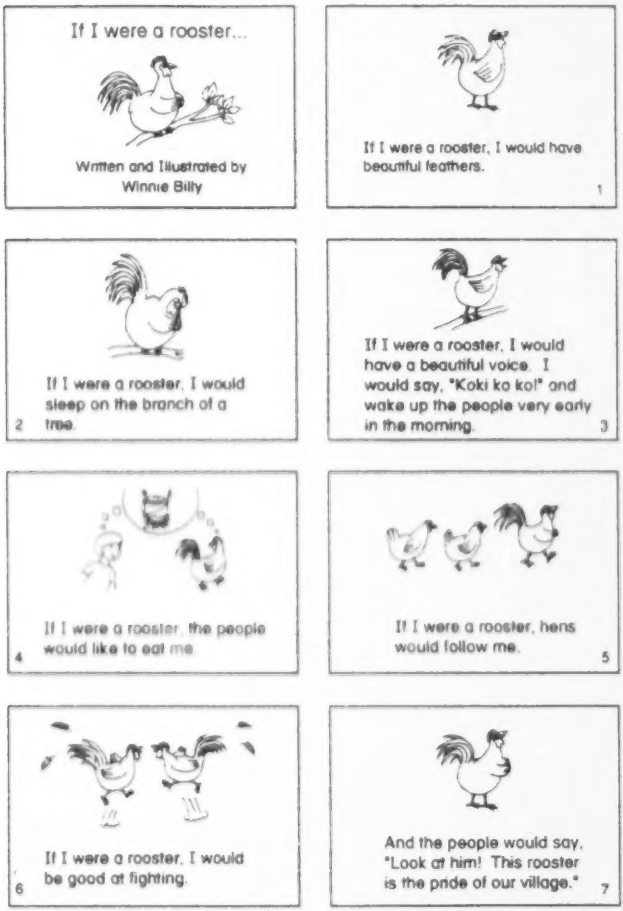
If I were a rooster...
Written and Illustrated by Winnie Billy
If I were a rooster, I would have beautiful feathers.
1
If I were a rooster, I would sleep on the branch of a tree.
2
If I were a rooster, I would have a beautiful voice. I would say, "Koki ko ko!" and wake up the people very early in the morning.
3
If I were a rooster, the people would like to eat me.
4
If I were a rooster, hens would follow me.
5
If I were a rooster, I would be good at fighting.
6
And the people would say, "Look at him! This rooster is the pride of our village."
7

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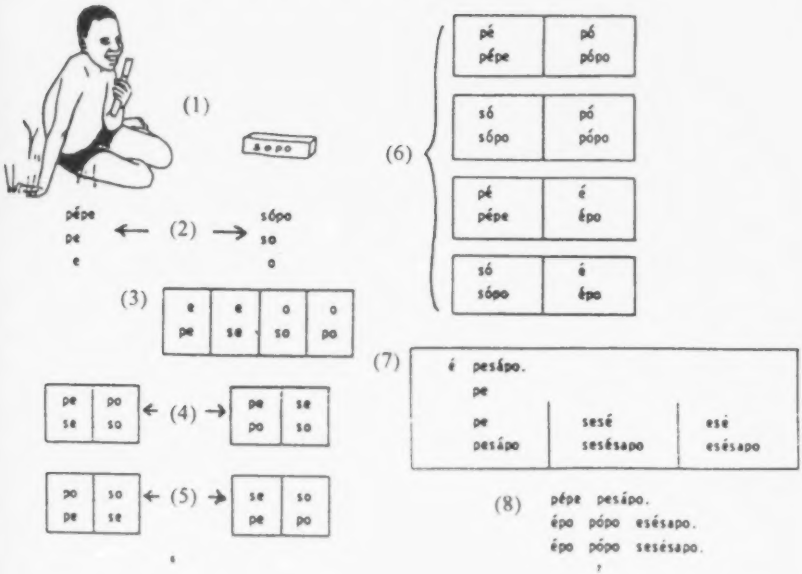
Figure 3. Sample repetitive story (2)

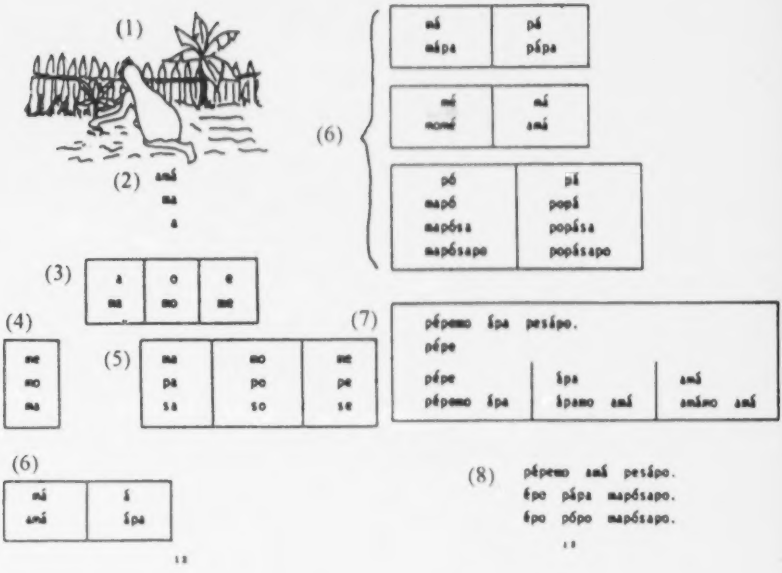
Figure 5. Sample lesson from a Gudschinsky primer[14]



(1)Picture for the key word (2)Analysis (3)Synthesis (4)Comparison (5)Contrast (6)Word Building (7)Functor lesson (8)Story

[14] Loeweke 1973:6–7

Figure 6. Sample lesson from a Gudschinsky primer[15]



(1)Picture for the key word (2)Analysis (3)Synthesis (4)Comparison (5)Contrast (6)Word Building (7)Functor lesson (8)Story

[15] Loeweke 1973:12–13

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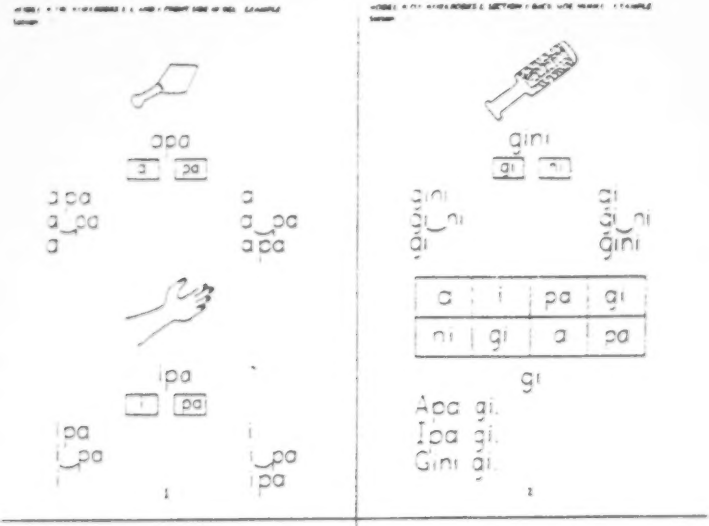
Figure 7. Sample lessons and stories from the Multi-Strategy method[16]



Wane dokome yaka mence pilyamo

Yaka doko baa ita ketae dokonya paienge.

Wane mendeme yaka doko ita ketae dokonya pitipumo kandatala yandome pilyamo.

Wane dokome yaka doko pyapala minao andaka pilyamo.

Yaka doko wane dokome yangao nalanya pilyamo.

Wane angome sipa pityape?

Embame yaka ange apimi nalapomo ao masilipi?

Yui wae kalapae

Yana mendeme yui mende endaki mate mendenya kandelyamo. Yana dokome yui doko nalanya masilyamo. Yui dokome yana doko kandao endaki pete dono kanda ielyamo. Yana dokome baanya wayange tange kandelyamo. Yana dokome yui doko kame silyamo. Yui doko paka pelyamo.

Saa yawea

Kote mendepa wane kole lapoma kateamoi. Depa pingimba doko wane kole miypa doko baa saa eke tala pea. Saa eke tao satete lapoma katea. Satete tepo dokonya andaka epea. Saa mandea dupa baanya kaiminingi kole doko maiya. Baame mena mende nyepala saa dupa-pipa yawea.

16 Stringer and Faraclas 1987:50, 54, 114–116

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Appendix B[17]

Context embedded		Context reduced	
Informal	**Planned - Informal**	**Semiformal**	**Formal**
Incidental learning. 'Real-life' experience. Participating: doing, watching, imitating, etc.	'Real-life' or concrete experiences where teachers consciously plan to 'live' what has to be learned, e.g. learning to read by reading approaches.	'Real-life' or concrete experiences which are talked about before they happen; while they are happening; after they have happened.	Teachers lecture. Students learn from text books and written instructions.
No pressure or time limit on learner to learn.	No pressure on students to perform or overt time lines.	Awareness of time constraints.	Time limits.
No institutionalized office of teacher	Teacher conscious of imparting knowledge.	Both teachers and children asking and answering a wide range of questions.	Context-reduced verbally mediated learning; abstracted from everyday life.
More learning of wholes rather than parts; successive approximations to efficient end product.	Planned use of informal learning strategies.	Children involved and responding in two-way conversation about the learning.	Highly conscious learning. Ideas explored through language.
		Observation, participation, etc. accompanied by verbal comment, analysis, sequenced learning.	Vicarious experience
Participants are living, learning is a by-product. Relatively unconscious.		Increasing purposefulness in terms of realistic goals; sense of learner control and use of feedback to adjust goals.	Purposeful learning; realistic goals learner control, use of feedback to adjust goals.
'Hidden curriculum' in classrooms.	Assessment part of the total experience, children unaware of being assessed.	Children become aware that assessment is an integral part of the learning process.	Students become oriented towards test achievement.

[17] Graham 1984:Appendix 1

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ABSTRACTS

Babcock, Dartha Jane Crocker. 1991. The development of a frequency word list for the spoken language of Krio. M.A. thesis, Union University, Jackson, Tennessee 66 pages.

The purpose of this study was to develop a frequency word list for the spoken language of Krio. The frequency word list, which included both content and function words, was developed by collecting data from two hours of taped conversations by 95 illiterate adults who speak Krio as a second language at market and in the home. The resulting frequency word list consists of 346 words with a frequency index of five or more selected from the 728 content and function words which made up the spoken corpus of 24,427 running words.

Gruber, Eugene Lee. 1986. Design specifications for the primer checking programs (PCP) (An automated method of checking reading primers.) M.A. thesis, University of Texas at Arlington. 132 pages.

The Primer Checking Program Design is intended to provide a framework from which a computer program can be written. This program will provide assistance to literacy personnel in the area of primer checking. It will perform mechanically a variety of checks which are now done manually at a great expenditure of time. At present the demands on the time of literacy workers are so great that they must take some shortcuts in order to get their work done. As a result it is not uncommon to find that primer charting is left undone, and the quality control afforded by extensive primer checking is sacrificed in deference to other, more urgent needs. The Primer Checking Program provides the literacy worker with a primer checking method which is more consistent, more extensive, and faster than the manual process in use at present. With this combination, it is reasonable to assume that the computer program will enable literacy workers to produce primer materials of higher quality with much less expenditure of time. It will also expedite the checking process for literacy consultants, freeing them to address concerns which demand more of their expertise than does the examination of physical primer lesson construction.

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Bradbury, Ronald Joseph. 1987. Evaluating small vernacular literacy programs. M.A. thesis, University of Texas at Arlington. 132 pages.

This thesis treats problems and processes involved in the evaluation of small literacy programs which have been implemented in minority language groups. While effective evaluation is difficult to implement for a variety of reasons, it is an important aspect of these small programs and must be addressed. Evaluations of a cross-section of documented literacy programs have been analyzed and an evaluation model proposed that is specifically intended for small literacy programs conducted in minority languages.

Stender, Kaye. 1988. The benefits of language learning for literacy specialists. M.A. thesis, University of Texas at Arlington. 99 pages.

This paper is a case study on the benefits of language learning as it related to a literacy program among the Kalam people in Papua New Guinea, during the period from 1982 to 1986. It discusses two main areas of benefit: (1) How language learning provided opportunities for communication, public relations, and participant observation. (2) How these opportunities gave helpful insights for the formation of a culturally relevant literacy program. Following the discussion of the benefits, a description of the resulting literacy program is given.

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REVIEWS

Literacy and Bilingualism. By James D. Williams and Grace Capizzi Snipper. White Plaines, NY: Longman, 1990 xiii, 162 pp. Paper $15.16.

Reviewed by Paula Starker

Williams and Snipper have combined their interests and years of experience in literacy and bilingualism to produce this intriguing theoretical as well as practical text. Williams is a professor of English and Snipper is the principal at an elementary school in Los Angeles. Their methodology within literacy, as presented in *Literacy and Bilingualism*, is based on the psychosocial approach. This stems from their view that language function as a social action that shapes individuals as well as the societies in which they live.

Williams and Snipper thoroughly review research of the mechanisms and issues involved in literacy, i.e., reading and writing and how they relate to bilingualism. The most striking features of the book are its thorough presentation of previous and current research findings and the authors' practical applications to literacy and bilingualism derived from those findings.

The text lists fifteen pages of well over two-hundred references that cover a wide variety of literature. Williams and Snipper empower the teacher who works with bilingual students by proving him or her with current theoretical and research information. They also effectively provide concrete suggestions to the literacy worker.

The book is not specifically written for the cross-cultural literacy worker on the field, but rather for the English teacher working with ethnic minorities in the United States. However, while the text might frustrate the cross-cultural literacy workers as the authors cite research and apply it to students of English, it does provide a broad-based theoretical foundation that may be applied to any language program where bilingualism is an issue. It also included intriguing cross-cultural research studies, which the reader could easily apply to his or her language program

The first chapter defines literacy as governed by context and social expectations. It describes the characteristics of functional literacy, cultural, academic and critical literacy. By doing so it lays the groundwork for the rest of the book.

The second chapter provides a detailed analysis of the mechanisms related to processing texts. Do you remember having to read out loud for your teacher in grade school to demonstrate your reading ability? Did you ever make any mistakes? Williams and Snipper present the four types of reading miscues as documented by Goodman (1973) (p. 24):

	Type	Printed Text/Uttered Text
1.	substitution	the beautiful woman/the bella woman
2.	omission	the wet, ugly dog/a wet ugly dog
3.	insertion	sent me a book/sent to me a book
4.	scramble	the boys ran/they all ran

Miscues can actually indicate that the pupil is striving to maintain the meaning of the text. Research has shown that ninety of all substitution errors preserve the meaning of the text. Williams and Snipper pointedly state, "...overconcern for word accuracy hinders comprehension. Moreover, among bilingual students it can create performance anxiety that may have long-term effects on academic achievement." (p.124) The authors state that stopping to correct students who make miscue errors forces them to attend to the surface features of the text. The text's meaning necessarily becomes secondary and writing problems overcorrectness paid to surface features. The authors suggest that if the miscue does not change the meaning of the text, teachers should ignore the temptation to stop the student to correct the error.

In Chapter 4, *Pedagogy: Teaching in more than one language*, the authors cite a Turkish study in Germany of children in 1984, which revealed that the concepts in content matter and discourse skills in one language were transferred to the second language. The degree of development in conceptual information in the second language is related to the degree of coordination achieved in developing both languages. Williams and Snipper suggest that each language-learning system complements the other and that two languages interact to mutual advantage as students move toward literacy and biliteracy.

In addition to supporting an integrated approach to teaching reading and writing, the authors also advocate a whole-language, literature-based methodology in the classroom. Considering the view that language and writing do not occur in a vacuum but in a social context, the authors highly recommend group interaction in the classroom.

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Williams and Snipper effectively describe how the whole-language approach could be implemented in a classroom situation. Students are told to write a story and then to read their story aloud. At first, the main emphasis is on oral discourse strategies, which the student learns from practice as he gets feedback from other students. The main goal is to get the students to see the relationship between speaking and writing. Once the student understands discourse features and learns how to see the global picture of any given text he or she wishes to communicate, the student will go back to the superficial details of spelling, etc.

Williams and Snipper state that oral skills for most bilingual students are greater than their literacy skills. With this knowledge, they suggest structuring an environment that combines orality and literacy, speaking and listening, and reading and writing.

For those concerned that it may be confusing or counterproductive to transfer back and forth between the native language and the national language, the authors have a helpful word of advice. "Don't hesitate to translate freely" (p.116). Williams and Snipper state that such translation will help students build their vocabulary in both L1 and L2 (native language and transfer language) and will also help provide a cognitive base.

Chapter 8 addresses the importance of creating a positive learning environment in the classroom. Williams and Snipper profoundly state, "Our job is not to put language into a child—our job is to get it out." (p. 128). What a refreshing concept! This perspective esteems the students being an intelligent, creative human being. It also lifts some of the burden from the teacher, thus keeping him or her from assuming the bulk of the responsibility for the student learning.

Literacy and Bilingualism is an excellent resource written for literacy workers, teachers, and students of linguistics who are interested in meeting the literacy needs of bilingual students at home or abroad.